

**AGENDA
GROUNDWATER BANKING JOINT POWERS AUTHORITY
BOARD OF DIRECTORS
REGULAR MEETING**

February 3, 2025
2:00 PM

Rosedale Rio-Bravo Water Storage District
849 Allen Road
Bakersfield, CA 93314

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618
2nd Floor Committee Room

This meeting will be made available to the public telephonically/electronically.

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online using the link and information below:

Via Web: <https://zoom.us/j/83815086560>
Meeting Number (Access Code): 838 1508 6560
Meeting Password: 982590
Telephone Dial In: (669) 900-6833

As a courtesy to the other participants, please mute your phone when you are not speaking.

PLEASE NOTE: Participants joining the meeting will be placed into the lobby when the Board enters closed session. Participants who remain in the “lobby” will automatically be returned to the open session of the Board once the closed session has concluded. Participants who join the meeting while the Board is in closed session will be placed in the waiting room. When the Board has returned to open session, the participants will be automatically added to the meeting.

CALL TO ORDER 2:00 p.m.

ROLL CALL Directors Pierucci, Selvidge, Reinhart, Swan

**PUBLIC COMMENT
NOTICE**

If you wish to address the Board of Directors on any item, please submit a request to speak via the “chat” feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing mmisuraca@rbwsd.com before 5:00 p.m. on February 2, 2025.

ALL VOTES SHALL BE TAKEN BY A ROLL CALL VOTE

1. COMMUNICATIONS TO THE BOARD

- a) Written:
- b) Oral:

2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

3. CONSENT ITEMS

- a) **Consideration of Special Meeting Minutes December 09, 2024**

4. JPA ADMINISTRATIVE AND FINANCIAL REPORT

- a) **Consideration of Quarterly Budget to Actual (Eileen)**

5. KERN FAN GROUNDWATER STORAGE PROJECT

- a) Engineering
 - i. Phase 1 Wells (Dan)
 - ii. **Consideration of Design/Data Collection Proposal on 3 Wells (Dan)**
 - iii. Conveyance Alternative Update (Dan)
- b) Construction
 - i. Phase 1 (West Enos/Stockdale North) Recharge (Dan)
 - ii. **Consideration of Soils Testing Proposal on Stockdale North (Dan)**

6. GENERAL MANAGER'S REPORT

7. OTHER BUSINESS

Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, and make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for factual information, request staff to report back at a subsequent meeting concerning any matter, or direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments.

8. CLOSED SESSION

9. OPEN SESSION

General Counsel may announce any reportable actions taken during Closed Session.

10. ADJOURN

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Board in connection with a matter subject to discussion or consideration at an open meeting of the Board are available for public inspection by contacting Megan Misuraca at mmisuraca@rrbwsd.com. If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available to the public at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically during the meeting.

Accommodations: Upon request, the Authority will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at the meeting. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to mmisuraca@rrbwsd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

DECLARATION OF POSTING: I, Megan Misuraca, declare under penalty of perjury, that I am employed by the Rosedale-Rio Bravo Water Storage District and I posted the foregoing Agenda at the District Office on or before January 30, 2025. I, Kristine Swan, declare under penalty of perjury, that I am employed by the Irvine Ranch Water District and I posted the foregoing Agenda at the District Office on or before January 30, 2025.

**BOARD OF DIRECTORS
GROUNDWATER BANKING JOINT POWERS AUTHORITY
MINUTES OF THE SPECIAL BOARD MEETING**

December 9, 2024
8:00 AM

DIRECTORS AND ALTERNATES PRESENT

Roy Pierucci
Peer Swan
Doug Reinhart
Jason Selvidge

DIRECTORS ABSENT

OTHERS PRESENT

Doug Gosling- JPA Legal Counsel
Dan Bartel- RRBWSD
Megan Misuraca- RRBWSD
Paul Cook- IRWD
Paul Weghorst- IRWD
Fiona Sanchez-IRWD
Christopher Smithson- IRWD
Dan Raytis- RRBWSD
Eileen Lin – IRWD
Herbert Ng- IRWD
Wyatt Clarke-IRWD
Neveen Adly- IRWD
Chris Smithson- IRWD

CALL TO ORDER

President Pierucci called the meeting to order at approximately 8:00 a.m.

PUBLIC COMMENT NOTICE

There were no public comments.

1. COMMUNICATIONS TO THE BOARD

- a). Written: None.
- b). Oral: None.

2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

None.

3. CONSENT ITEMS

- a) Meeting Minutes August 05, 2024

A motion was made by Director Reinhart with a second by Director Selvidge to adopt the consent items. A roll call vote was taken and the motion unanimously passed.

4. JPA ADMINISTRATIVE AND FINANCIAL REPORT

- a) Consideration Fiscal Year End June 30, 2024 Audit and Financial Statements- Mr. Ng presented the Fiscal Year End June 30, 2024 financials in addition to the audit completed by Davis Farr, LLP. A motion was made by Director Reinhart with a second by Director Swan to approve the Fiscal Year End 2023-2024 financial report and accept the annual audit as presented. A roll call vote was taken and the motion unanimously passed.
- b) Consideration of Quarterly Budget to Actual- Mr. Smithson reviewed the budget to actual results for the quarter ending September 30, 2024 with the Board. A motion was made by Director Reinhart and a second by Director Selvidge to accept the budget to actual report for the quarter ending September 30, 2024 and approve a cash call of \$750,000 to be contributed by each partner for a total amount of \$1.5 million. A roll call vote was taken and the motion unanimously passed.
- c) Consideration of Appointment of Assistant Treasurer- Ms. Adly reported on the assistant treasurer position. A motion was made by Director Swan with a second by Director Reinhart to appoint Eileen Lin as assistant treasurer effective immediately and remove Jennifer Davis. A roll call vote was taken and the motion unanimously passed.

5. KERN FAN GROUNDWATER STORAGE PROJECT

- a) Engineering
 - i. Design Update- Mr. Bartel briefed the Board on the latest design efforts.
 - ii. Construction Update-
 1. Ratification of Change Orders No. 1 & 2- RLH- Mr. Bartel reported the project is 58% complete and reviewed RLH Change Orders No. 1 and 2 with the Board.
A motion was made by Director Selvidge and second by Director Reinhart to ratify Change Order No. 1 in the amount of \$204,724.37 to prepare for the boring on Stockdale Hwy. A roll call vote was taken and the motion unanimously passed.
A motion was made by Director Selvidge with a second by Director Reinhart to approve Change Order No. 2 in the amount of \$562,000 for additional pipe installation for the Stockdale North Cased Crossing. The motion unanimously passed.

2. Consideration of Stockdale North Earthwork Bids- Mr. Bartel briefed the Board on the bidding process and reviewed the bid summary. A motion was made by Director Selvidge with a second by Director Reinhart to award the Stockdale North Earthwork project to Pay Dirt Construction, Inc in the amount of \$1,047,002.02. A roll call vote was taken and the motion unanimously passed.
 - iii. Conveyance Alternative- Mr. Bartel briefed the Board on the latest activities and meetings with various entities to partner on a conveyance alternative for the Kern Fan Project. Mr. Bartel also reported that a letter seeking participants interested in the CVC Alternative 5 project would be distributed in 1st quarter 2025.
- b) Consideration of WSIP Early Funding- Mrs. Sanchez briefed the Board on the regulations for early funding requests for WSIP funds. A motion was made by Director Reinhart with a second by Director Selvidge to authorize staff to prepare and submit an early funding request to the California Water Commission based on 5% of the Kern Fan Groundwater Storage Project's Maximum Conditional Eligibility Determination. The motion unanimously passed.
- c) State Agreements Update- Ms. Sanchez briefed the Board on latest efforts to obtain agreements with the Department of Water Resources and KCWA.

6. GENERAL MANAGER'S REPORT

No report.

7. OTHER BUSINESS

No report.

8. CLOSED SESSION

None.

9. OPEN SESSION

N/A

10. ADJOURN

Director Pierucci adjourned the meeting at approximately 9:20 A.M.

ATTEST:

Authority Secretary
Doug Gosling

February 3, 2025
Prepared by: Christopher
Smithson
Agenda Item: 4a

FY 2024-25 Quarterly Actual to Budget Results

DISCUSSION:

The quarterly unaudited actual to budget and forecast results for the six-month period ending December 31, 2024, is attached as Exhibit "A". The report separates capital and operating expenditures.

The six-month year to date total expenditures were \$3.1 million compared to a budget of \$4.8 million. Actual expenditures were \$1.7 million or 36% under budget. This is primarily due to the timing of construction expenses.

Based on the proposed FY 2024-25 second quarter budget and the current fund balance, no cash call is requested at this time.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – FY 2024-25 Actual to Budget Results (Unaudited)

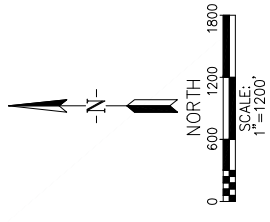
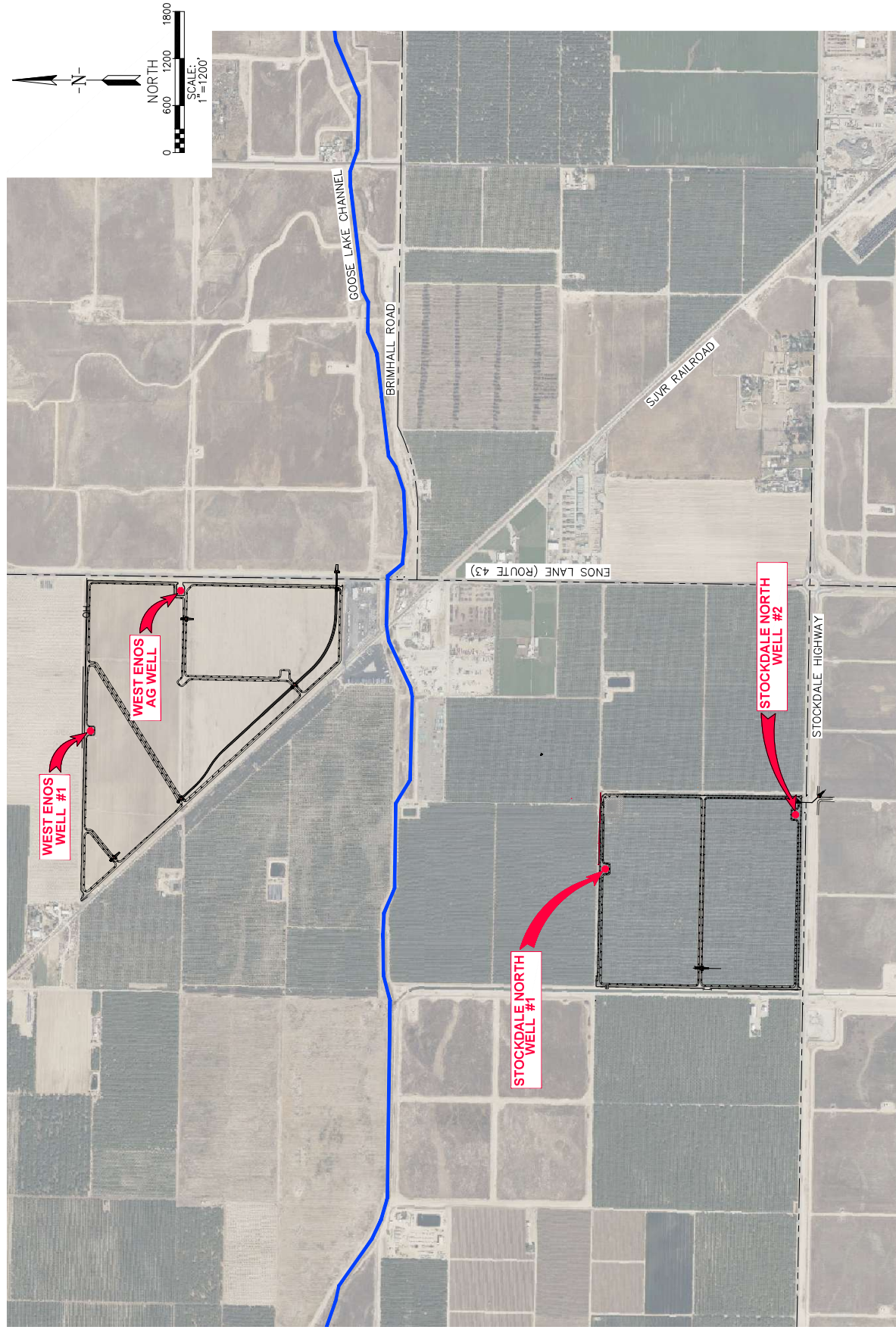
Exhibit "A"
Groundwater Banking Joint Powers Authority

Actual to Budget Results (Unaudited)

Fiscal Year 2024-25

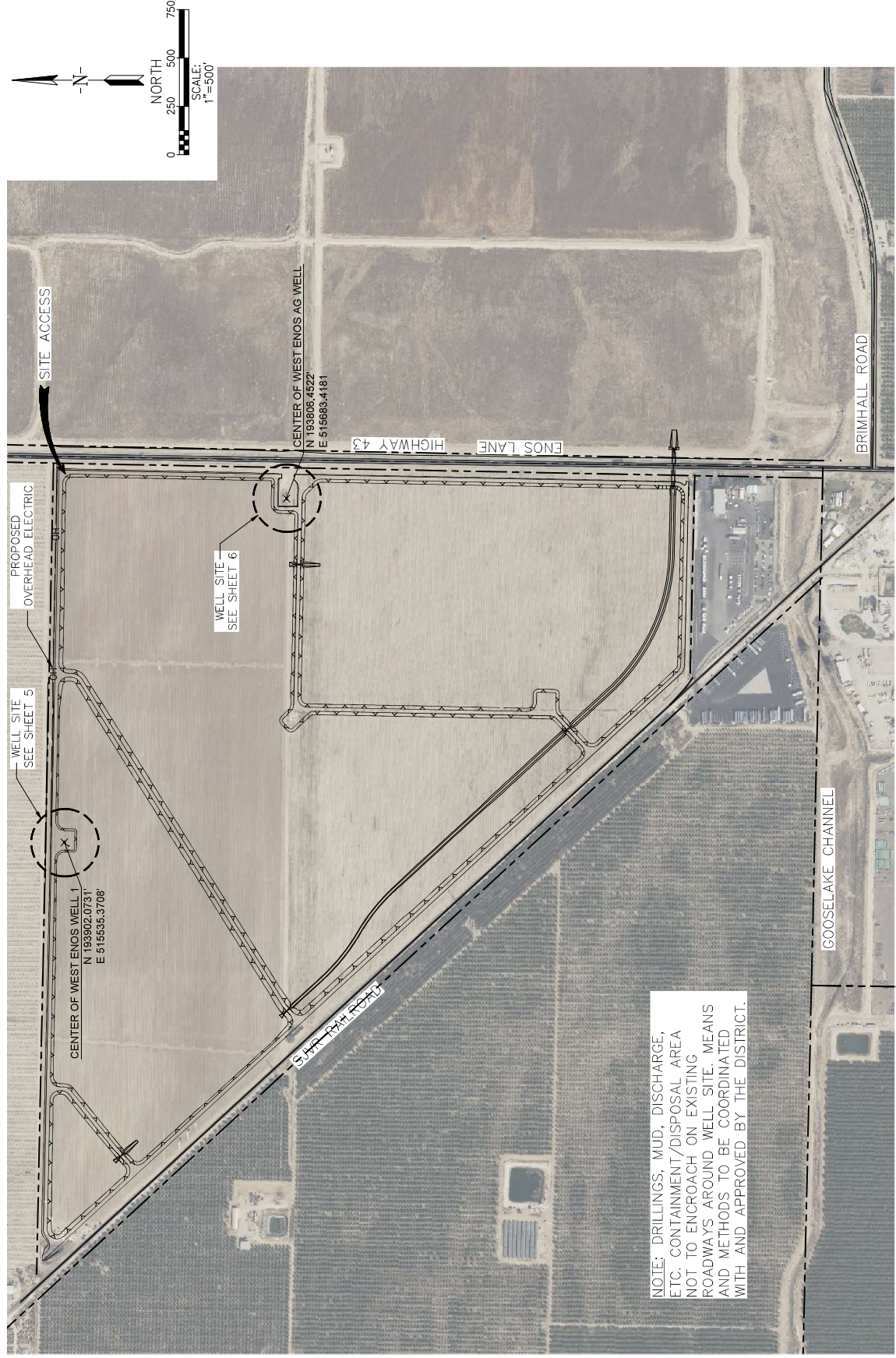
(in hundreds)

	Actual 12/31/24 (Unaudited)	Budget FY 2024-25	Budget to Actual (Over)/Under	Budget Variance %	FY2024-25 Budget Variance/Forecast Comments
Kern Fan Groundwater Capital Project					
Engineering - Planning and Design Staff	\$ 37,300	\$ 40,500	\$ 3,200	8%	
Grant Administration and Reporting	500	7,200	6,700	93%	
CWC and USBR Feasibility Studies	45,800	1,000	(44,800)	-4480%	South Valley Project. Work is complete.
JPA Administration	26,100	27,800	1,700	6%	
Supplemental Environmental Impact Report	0	11,600	11,600	100%	Timing of expenditures
Agreements with State Agencies	1,200	7,100	5,900	83%	
Engineering Design - Consultants	11,000	1,170,000	1,159,000	99%	Timing of expenditures
Engineering CA&I - Outside	36,400	513,300	476,900	93%	Timing of expenditures
Construction	1,549,800	3,855,000	2,305,200	60%	
Legal JPA	3,800	7,800	4,000	51%	
Development of Agreement with FWS	-	0	-	0%	
Development of Agreement with DWR	-	0	-	0%	
Environmental	9,900	13,500	3,600	27%	
Permitting	-	1,000	1,000	100%	
Capital Project Total	1,721,800	5,655,800	3,934,000	70%	
Operating Expense					
West Enos Recharge Facility	-	-	-	0%	
Administration/Management	15,300	35,400	20,100	57%	
Audit	6,000	9,500	3,500	37%	
Bank Charges	6,100	3,000	(3,100)	-103%	
Insurance	2,700	3,500	800	23%	
Membership	3,100	1,100	(2,000)	-182%	
Website Maintenance	1,000	1,000	-	0%	
Utilities	-	-	-	0%	
Operating Expense Total	34,200	53,500	19,300	36%	
Revenue					
Interest Revenue	(6,100)	(3,000)	3,100	103%	
Grants	1,350,700	(896,100)	(2,246,800)	-251%	
Revenue Total	1,344,600	(899,100)	(2,243,700)	-250%	
Total	\$ 3,100,600	\$ 4,810,200	\$ 1,709,600	36%	



A WELL SITE LOCATION/ACCESS MAP
2

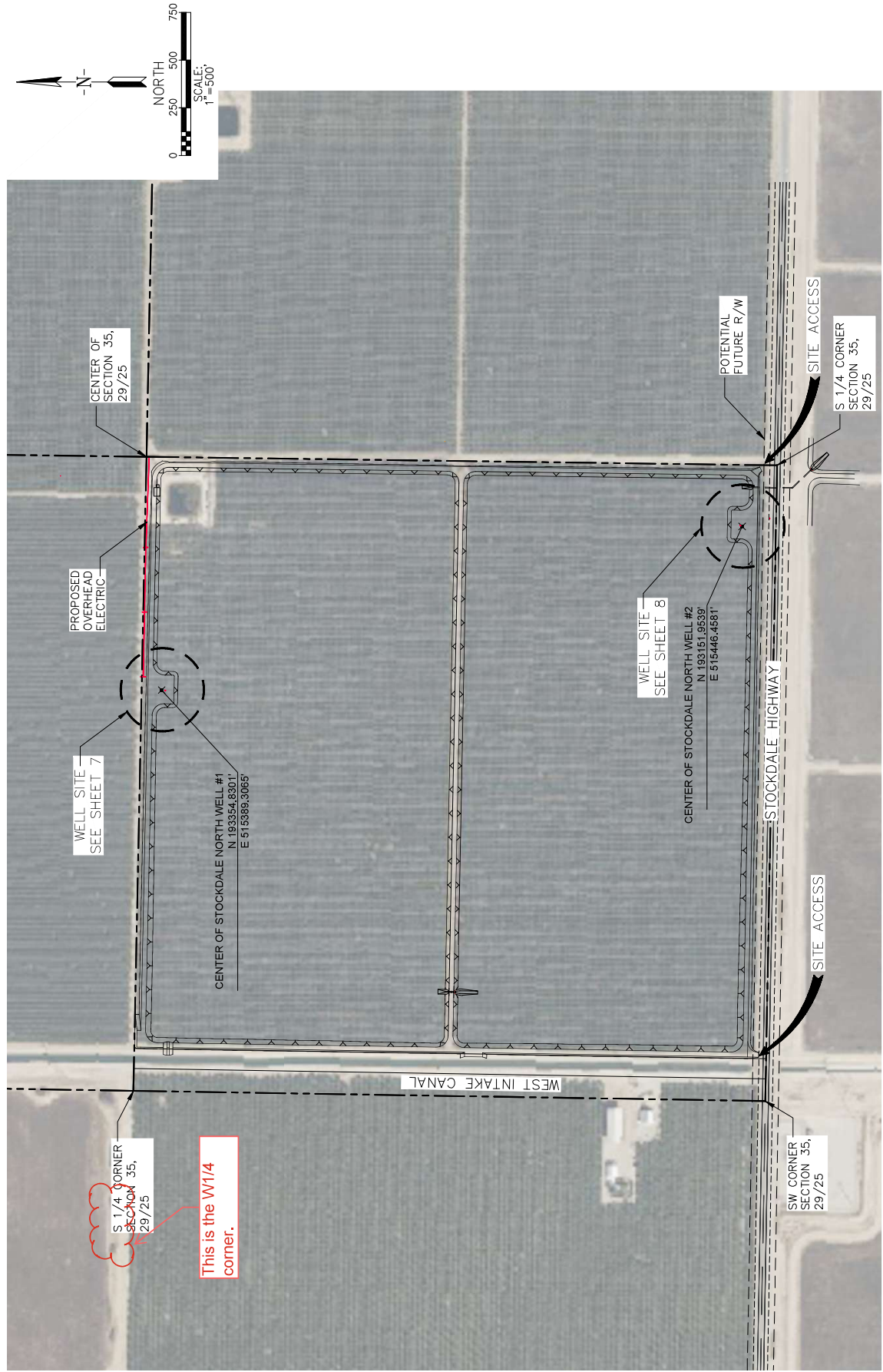
90% DRAFT



NOTE: DRILLINGS, MUD, DISCHARGE, ETC. CONTAINMENT/DISPOSAL AREA NOT TO ENCROACH ON EXISTING ROADWAYS AROUND WELL SITE. MEANS AND METHODS TO BE COORDINATED WITH AND APPROVED BY THE DISTRICT.

A WEST ENOS WELL SITE LOCATION MAP

90% DRAFT



S 1/4 CORNER SECTION 35, 29/25

This is the W1/4 corner.

4 STOCKDALE NORTH WELL SITE LOCATION MAP

90% DRAFT

January 14, 2025

Groundwater Banking JPA
c/o Mr. Dan Bartel
P.O. Box 20820
Bakersfield, CA 93390

**Re: Proposed Scope of Work and Cost Estimate for Data Collection and Well Design –
Two Stockdale North Wells and One West Enos Well**

Dear Mr. Bartel,

This letter outlines Thomas Harder & Co.'s (TH&Co's) proposed scope of work and cost estimate to provide data collection and well design services for three new production wells for the Groundwater Joint Powers Authority (the JPA) Stockdale North 1 and 2 and West Enos Well 1 Project (the Project) near Bakersfield, California. TH&Co's scope of work has been structured to support Zeiders Consulting, the JPA and District's staff in the design, construction and testing of the new wells. TH&Co's primary tasks include:

- Review and Comment of Technical Specifications
- Borehole Data Analysis
- Well Design
- Consultation with Field Inspector during Well Development
- Analysis of Pumping Test Data and Recommendations for Design Discharge Rate and Pump Setting

The budget for this scope of work is based on the following assumptions:

- The pilot boreholes for each well will be drilled to total depths of 800 ft below ground surface (ft bgs).
- Isolated aquifer zone testing will be conducted in the pilot borehole for one well.
- Onsite inspection and construction management during well drilling, construction and testing will be conducted by Zeiders Consulting and/or District staff as-needed.

Our proposed detailed scope of work is as follows:

Scope of Work

Task 1 – Review and Comment of Technical Specifications

TH&Co will review the existing plans and drilling and construction technical specifications prepared by Zeiders Consulting for the West Enos and North Stockdale wells. The cost estimate for this task assumes TH&Co will review and provide comments to Zeiders Consulting on the existing plans, including recommendations, if any. TH&Co will review the documents to ensure that they will be sufficient and complete to enable prospective drilling contractors to provide comparable competitive bids to conduct the work in accordance with the approved design criteria. It is assumed that JPA will advertise the bid to prospective contractors.

Task 2 – Borehole Data Analysis

TH&Co will analyze data collected during the drilling and testing of the pilot boreholes for the three wells in order to develop recommendations for isolated aquifer zone testing (one location) and final well design. It is understood that either Zeiders Consulting and/or District staff will deliver all borehole soil samples and geophysical logs to the TH&Co office located in Anaheim, California for analysis. Composite soil samples from each 10-ft sample interval should be delivered in one-gallon freezer bags labeled with the well name, date the sample was collected, and the depth interval for the sample.

Subtask 2.1 – Log and Analyze Soil Samples Collected from the Conductor and Pilot Boreholes

After receiving the conductor casing and pilot borehole soil samples, TH&Co will log the drill cuttings and identify the depth, thickness and characteristics of aquifers for well screen design. All cuttings will be logged in accordance with the Unified Soil Classification System (USCS). The completed lithologic log will be entered into logging software (LogPlot™) for presentation and submittal to the JPA within two weeks after receipt of the samples. The cost estimate for this task assumes each pilot borehole is 800-ft deep.

Subtask 2.2 – Analyze Borehole Geophysical Logs

TH&Co will review the pilot borehole geophysical logs provided by Zeiders Consulting or the JPA in order to inform selection of samples for sieve analyses and identify aquifers to target for the well design. It is anticipated that a full suite of geophysical logs will be obtained including resistivity (short and long-normal), guard or laterolog, gamma ray, spontaneous potential, and sonic logs (Scale of 1 inch = 50 ft).



Subtask 2.3 – Sieve Analysis of Formation Samples

TH&Co will conduct sieve analysis of soil samples from selected depth intervals in order to design the filter pack for the well. Selection of the filter pack will determine the slot size for the well screen. It is assumed for cost estimating purposes that up to eight samples will be analyzed for each well. The results of the sieve analyses will be presented in the Recommended Well Design Letters (Task 3).

Task 3 – Recommended Well Design Letters

Based on analysis of soil samples and geophysical logs from the pilot boreholes, TH&Co will prepare letter reports describing the recommended well designs for each well. The reports will include the results of sieve analyses and recommendations for the filter pack gradation, screen slot size, and screened intervals for the wells. The draft recommended well design will be submitted to the JPA for review and approval within three days of receipt of the samples and geophysical logs. A well design conference call for each well is included in Task 3, as needed. Upon approval, TH&Co will finalize the well design and submit it to the JPA for directing the drilling contractor and/or Zeiders Consulting to procure the well casing and filter pack.

It is assumed for cost estimating purposes that one draft version of the recommended well design letter for each of the two wells will be submitted to the JPA in pdf format via email for review and comment. One final version of each of the three wells will be submitted after addressing comments (electronic submittal only).

Task 4 – Consultation with Field Inspector during Well Development

This scope of work and cost estimate is based on the assumption that field inspection and monitoring of well development will be conducted by Zeiders Consulting and/or District Staff. Well development will include initial development by airlift and swab and final development by pumping. TH&Co will provide as-needed consultation to the field inspector to track the progress of development and determine the point at which development is complete. The cost estimate assumes up to 10 hours of consultation during well development for each well.

Task 5 – Pumping Test Support

TH&Co will provide coordination, support and data analysis during the pumping tests for each well. It is assumed that both step-drawdown and constant rate pumping tests will be conducted for each well. It is further assumed that Zeiders Consulting and/or District staff will provide the pumping test data (e.g. pumping rate and drawdown) electronically to TH&Co upon completion of the tests.



Subtask 5.1 –Support for Step-Drawdown and Constant Rate Pumping Tests

TH&Co will provide support to Zeiders Consulting and/or the District staff during pumping tests for each well. This task will include:

- Review of the pumping development data and recommendations for pumping rates for the step-drawdown tests.
- Rental and installation of pressure transducers in the pumping well and one observation well, to be installed one week before the tests and removed one week after completion of the tests.

The budget for this task assumes that the pumping tests for the three wells do not overlap and therefore, the budget includes separate rental and installation costs for each well.

Subtask 5.2 – Analysis of Pumping Test Data

TH&Co will analyze the pumping test data from each of the three wells. The purpose of the step-drawdown test is to assess the specific capacity and efficiency of the well as criteria for determining an optimum pumping rate and pump setting. Specific capacity and efficiency can be assessed through an evaluation of the different components of head loss as groundwater enters the well. The constant rate tests will provide information on aquifer parameters (transmissivity) and long-term drawdown from pumping the well at a discharge rate close to the planned pump design rate.

TH&Co will create the following charts using the pumping test data. These charts will be included in the Pump Design Letter:

- Step-Drawdown Test Chart; drawdown over time
- Constant Rate Pumping Test Chart; drawdown over time
- Specific Capacity and Well Efficiency Diagram; drawdown over discharge rate
- Distance Drawdown Chart; drawdown over distance from pumping well

The specific capacity and well efficiency of the wells will be used for the pump design letter.

Subtask 5.3 – Pump Design Letters

Upon completion of the analysis of the pumping test data, TH&Co will prepare letter reports for each well that present recommendations for the design discharge rates and pump settings. The reports will include:

- Pumping test charts showing the analysis and results of pumping test data.



- Recommendations for design discharge rate and pump setting.

It is assumed for cost estimating purposes that one draft version of the recommended discharge rate and pump setting report for each of the three wells will be submitted to the JPA in pdf format via email for review and comment. One final version will be submitted after addressing comments for each of the three wells (electronic submittal only).

Cost Estimate

The total estimated cost to perform Tasks 1 through 4 described above is \$58,620 as detailed in Table 1.

I appreciate the opportunity to provide consulting services for the Groundwater Banking JPA. If you have any questions, don't hesitate to contact me at (714) 394-4449.

Sincerely,



Thomas Harder, P.G., C.HG.
Principal Hydrogeologist

cc: Curtis Skaggs, Dee Jaspar and Associates, Inc.



**Cost Estimate for Hydrogeological Services
Two Stockdale North Wells and One West Enos Well**

Task	Sub task	Description	Principal Hydro-geologist \$220/hr	Project Hydro-geologist \$135/hr	Staff Hydro-geologist \$115/hr	Graphics \$100/hr	Clerical \$80/hr	Total Labor	Reimbursable Expenses ¹	Total Cost
1 Review and Comment of Technical Specifications										
		Review existing Technical Specifications.	2	24				\$ 3,680	\$ 0	\$ 3,680
								Subtotal Task 1	\$ 0	\$ 3,680
2 Borehole Data Analysis										
	2.1	Log and Analyze Soil Samples Collected from the Pilot Borehole (three wells; assume 800 ft deep each)	3	6	72			\$ 9,750	\$ 0	\$ 9,750
	2.2	Analyze Borehole Geophysics (three wells)	6	6				\$ 2,130	\$ 0	\$ 2,130
	2.3	Sieve Analysis of Formation Samples (Assumes 8 samples per well)			30			\$ 3,450	\$ 0	\$ 3,450
								Subtotal Task 2	\$ 0	\$ 15,330
3 Recommended Well Design Letters^{2,3}										
		Preparation of Three Recommended Well Design Letters; Includes One Conference Call per Well	6	36		18	6	\$ 8,460	\$ 0	\$ 8,460
								Subtotal Task 3	\$ 0	\$ 8,460

**Cost Estimate for Hydrogeological Services
Two Stockdale North Wells and One West Enos Well**

Task	Sub task	Description	Principal Hydro-geologist \$220/hr	Project Hydro-geologist \$135/hr	Staff Hydro-geologist \$115/hr	Graphics \$100/hr	Clerical \$80/hr	Total Labor	Reimbursable Expenses ¹	Total Cost			
4	Consultation with Field Inspector During Well Development												
		Consultation with Field Inspector During Well Development	6	15				\$ 3,345	\$ 0	\$ 3,345			
			Subtotal Task 4					\$ 3,345	\$ 0	\$ 3,345			
5	Pumping Test Support												
		Support for Step-Drawdown and Constant Rate Pumping Tests; includes installation of transducers in the pumping well and a nearby well ⁴	4	4	54			\$ 7,630	\$ 4,050	\$ 11,680			
	5.1							\$ 7,395		\$ 7,395			
	5.2	Analysis of Pumping Test Data	3	9	48			\$ 8,730		\$ 8,730			
	5.3	Pump Design Letters ⁵	6	36	18			\$ 23,755	\$ 4,050	\$ 27,805			
			Subtotal Task 5					\$ 23,755	\$ 4,050	\$ 27,805			
			Total for Tasks 1 through 5								\$ 54,570	\$ 4,050	\$ 58,620

Notes:

- ¹ Reimbursable expenses include driving mileage and transducer rental costs.
- ² Assumes participation in 3 well design conference calls (1hr/call).
- ³ Includes preparation of one draft version (electronic submittal only) and one final version of each recommend well design letter (electronic submittal only).
- ⁴ Assumes two transducers for two weeks for each well; assumes separate installation/removal costs for each well.
- ⁵ Includes preparation of one draft version (electronic submittal only) and one final version of each pump design letter (electronic submittal only).

From: [Dan Bartel](#)
To: [Angie Thompson](#); [deann@wkwd.org](#); [David Halopoff](#); [Steve Teglia](#); [Richard Iger](#); [Angelica Martin](#); ["Wendy Adams-Rosenberger"](#); [David Ansolabehere](#); [Dave Halopoff](#); [Trent Taylor](#); [Richard Iger](#); [Dominic Sween](#); [ghammett@wkwd.org](#); [Jason Gianquinto](#); [P. E. Sheridan Nicholas - Wheeler Ridge-Maricopa W.S.D.](#) ([snicholas@wrmsd.com](#)); [Eric McDaris](#); ["tim@bvh2o.com"](#); [Amrit Mangat](#); ["Tom Neisler"](#); [mgilkey@westsidewa.org](#); [Jamie Marquez](#); [Morgan Campbell](#); [Amrit Mangat](#); [Jeevan Muhar](#); [skye@kern-tulare.com](#); [Eric Limas](#); [Tim Ruiz](#); [Jamie Marquez](#); [Joe Butkiewicz](#)
Cc: [McCarthy, Thomas](#); [Bauer, Lauren](#); [Wallace, Craig](#); [Long, Joseph](#); [wdahl@dahlconsultants.com](#); [cskaggs@djacivil.com](#); [sanchezf@IRWD.com](#); [Paul Weghorst \(Weghorst@irwd.com\)](#)
Subject: Kern Fan Project Alternative 5
Date: Thursday, January 9, 2025 8:10:00 AM
Attachments: [2024-08-23 jpa, GBJPA Kern Fan Project With KCWA.pdf](#)

Over the past several months we have made numerous presentations about the Kern Fan Groundwater Storage Project, particularly the Alternative 5 conveyance route, which we believe is a big win for Kern County water interests. As currently envisioned, this alternative involves constructing and operating a parallel canal that creates up to 750 cfs of new capacity through Pool 2 (perhaps through Pool 3) of the CVC. A total of 450 cfs would be dedicated to agencies participating in the Kern Fan Project, and 300 cfs would augment flow in the CVC. At the recent CVC Advisory meeting we were encouraged to reach out to folks directly, as to possible interest in participation.

As part of evaluating the Alternative 5 conveyance project we are asking other Kern County water agencies if there is interest in continued discussions regarding participating in the project. Interest might be in 1) augmenting flow in the CVC; 2) participating in the Kern Fan Project; and/or 3) both. The conveyance facility that is being proposed would be substantially more cost effective than implementing a standalone project to augment flows in the CVC and a separate Kern Fan Project conveyance project. The combined project would increase conveyance in Kern County in the most cost-effective way that would drive down the cfs unit cost for all participants.

We are planning on hosting a meeting in early February for those agencies who are interested in further discussions regarding participating in the conveyance project. There would be a higher-level technical presentation by hydraulic experts from Stantec and Wayne Dahl. There would also be a discussion about the Kern Fan Project grant requirements, appropriate sizing of the facilities, and a round table discussion about what a process might look like to implement a multi-agency project. If interested in participating in the discussion, please reply to me directly by January 17 and we will extend a poll to those as to dates and times to meet.

Colossians 3:23-24 Whatever you do, work at it with all your heart, as working for the Lord, not for human masters, since you know that you will receive an inheritance from the Lord as a reward. It is the Lord Christ you are serving.

Dan Bartel, P.E.



Ph (661) 589-6045 Cell (661) 333-8747

849 Allen Road

Bakersfield, CA 93314

<https://www.kernfanproject.com/>



DEE JASPAR & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS
 2730 UNICORN ROAD, BLDG A
 BAKERSFIELD, CA 93308
 PHONE (661) 393-4796
 FAX (661) 393-4799

January 17, 2025

Dan Bartel
 c/o Groundwater Banking Joint Powers Authority (GBJPA)
 849 Allen Road
 Bakersfield, CA 93314

Re: West Enos Recharge Facilities Project
Weekly Report (Week 49)

Mr. Bartel,

This serves as a project update for Weeks 48-49 of the West Enos Recharge Facilities Project.

Earthwork Phase – Lonnie Cross

Project Status as of:	1-17-25	Contract Totals	
Notice to Proceed ¹ :	2-9-24	Contract Amount:	\$1,148,849.53
Contract Duration:	150	Change Orders:	\$31,845.52
Completion Date:	7-8-24	Revised Amount:	\$1,180,695.05
Elapsed Days:	354	Work Completed:	\$1,174,352.37
Remaining Days:	-	% Completed:	99%
Change Order – Days:	-		

¹Notice to Proceed was set for January 22, 2024, however the District delayed the start to make sure all provisions of the grant agreement were being followed. Lonnie Cross started work on February 9th after the biological clearances and training.

Lonnie Cross Land Leveling has completed all the work they can do and they have demobilized the project site. They will return at a later date to complete the last of the levee embankment fill in the area of the bore pit.

Cased Crossing Phase – Allstate Boring

Project Status as of:	1-17-25	Contract Totals	
Notice to Proceed ¹ :	2-29-24	Contract Amount:	\$678,388.00
Contract Duration:	90	Change Orders:	\$186,553.00
Completion Date:	5-29-24	Revised Amount:	\$864,941.00
Elapsed Days:	324	Work Completed:	\$708,346.00
Remaining Days:	-	% Completed:	82%
Change Order – Days:	-		

Allstate Boring completed the casing installation for all four cased crossings beneath Enos Lane and has demobilized the project. They have work remaining that involves a cased crossing across Stockdale Highway for the Stockdale North Project. A preconstruction meeting was held in the field on November 27, 2024 with Caltrans. Work is expected to begin in the month of January.

Structures Package Phase – RLH Fire Protection, Inc.

Project Status as of:	1-17-25	Contract Totals	
Notice to Proceed ¹ :	5-15-24	Contract Amount:	\$1,547,230.00
Contract Duration:	180	Change Orders:	\$204,724.37
Completion Date:	11-11-24	Revised Amount:	\$1,751,954.37
Elapsed Days:	248	Work Completed:	\$1,039,824.82
Remaining Days:	-	% Completed:	59%
Change Order – Days:	-		

RLH continued work on the Goose Lake Turnout and the West Enos Turnout. They completed the excavation and fine grading of the inlet and outlet sections of the Goose Lake Turnout and the inlet to the West Enos Turnout. They installed the geotextile fabric, pea gravel, and rock rip-rap per the plans and also installed the C-10 Canal gates.

Sincerely,

Curtis Skaggs
Curtis M. Skaggs, P.E.

Pictures (1-6-25 thru 1-17-25)



Placing Fabric and Gravel Rock at West Enos Turnout Structure



Placing Fabric and Gravel Rock at West Enos Turnout Structure



Gravel Rock and Fabric Upstream of Goose Lake Turnout Structure



Slide Gate Installation



Excavation for Outlet Channel from Goose Lake Turnout



Grading for Outlet Channel from Goose Lake Turnout



Finishing Installation of Slide Gates



Rip-Rap Placement at West Enos Turnout



Spreading Pea Gravel on Outlet Channel of Goose Lake Slough Turnout



Rip-Rap Installed at Inlet Channel of Goose Lake Slough Turnout



Rip-Rap Installation at Outlet Channel of Goose Lake Slough Turnout



**GROUNDWATER BANKING JOINT POWERS AUTHORITY
STOCKDALE NORTH RECHARGE BASIN FACILITIES**

PRE-CONSTRUCTION MEETING
January 21, 2025 at 2:00 pm

1. Purpose: To establish working understanding between parties and to discuss construction schedule, shop drawings and other submittals, cost breakdown of major lump sum items, processing of submittals and applications for payment, and other subjects pertinent to the execution of the work.

Introductions: **Dan Bartel, Markus Nygren, Curtis Skaggs, Matthew Kimbro, and Robert Huang (via Teams)**

2. Contract Documents: Approved and executed by Contractor and GBJPA.

Key Dates:

- | | |
|--------------------------------------|-------------------|
| a. <i>Notice of Award:</i> | December 11, 2024 |
| b. <i>Notice to Proceed:</i> | January 17, 2025 |
| c. <i>Commencement of Work:</i> | January 27, 2025 |
| d. <i>Completion Date (Overall):</i> | May 5, 2025 |

3. Contract Duration is 120 calendar days from the date of the Notice of Award. Liquidated damages shall be assessed at the rate of \$500 per calendar day beyond the specified completion dates above.

Construction working hours are 7:00 am to 5:00 pm, Monday through Friday. Permission from the Owner is required for work outside of these hours.

4. Description of Work: Contractor to supply all labor, materials, and equipment to perform all operations necessary to furnish, construct, and complete the site improvements for the Stockdale North Recharge Basin Facilities Project in Section 35, T29S, R25E, M.D.B.&M. The work involves clearing and grubbing, site demolition, pump destruction, irrigation pipe removal, over-excavation and recompaction, levee earthwork, and ripping and floating basin bottoms.

5. Responsible Personnel:

Project Owner: Groundwater Banking Joint Powers Authority (GBJPA)

Project Design Engineer: Meyer Civil Engineering

Project Contractor: Pay Dirt Construction

Construction Manager: **Matthew Kimbro**

Construction Superintendent: **Matthew Kimbro**

Project Manager/Construction Inspection: Curtis M. Skaggs, Dee Jasper & Associates, Inc.

Project Communication:

- a. Requests for Information shall be submitted to the Project Manager. Field changes shall not be made without written authorization from the Project Manager. RFI's responses will be returned to the Contractor within seven days.
- b. Change order requests shall be submitted to the Project Manager for review and processing. Approved change orders will be issued by the Owner.
- c. Applications for progress payment shall be submitted to the Project Manager for review and processing by the 5th of each month for the period through the 25th of the preceeding month. A five-percent retention will be withheld. Contractor shall submit certified payroll records monthly and submit to DIR.
- d. Record Documents shall be maintained by the Contractor (plans, specs, daily reports, pictures). Project close-out documents shall include record drawings, testing reports, survey data, warranties and bonds, and spare parts and be submitted within seven calendar days before final project payment.
- e. Project Meetings: Project meetings will be held to review contractor's progress, construction issues, and any other project related items. Date and time of these meetings will be mutually agreed to prior to commencing construction.

6. Project Safety:

Contractor shall keep a copy of his IIPP on-site and operate in accordance with this plan and the requirements of Cal OSHA or other applicable agencies. Contractor shall ensure that each employee is trained in the work practices necessary to safely perform his/her job as well as be aware of potential hazards. On-site safety meetings shall be held by the Contractor weekly. Safety is an utmost priority. Contractor shall use safe speed limits on public and private roads and be cautious of ingress and egress to the site from Stockdale Highway.

Contractor shall immediately advise the Project Manager of any hazards found or discovered or hazardous materials.

7. Storage Yard:

Contractor to store all materials to prevent damage by elements. Containers shall be installed for trash and daily clean-up. Contractor shall furnish portable sanitary facilities. Contractor shall be responsible for any necessary fencing and/or security.

Contractor shall maintain this area in a clean and orderly fashion. All vehicles shall be parked in the staging area.

8. Construction Water:

Construction water may be obtained from adjacent Rosedale Intake Canal. Contractor to make arrangements with the District.

9. Construction Survey:

The Owner will furnish construction staking. The owner will furnish information for section corners necessary for establishing project control. The bench mark for this project is a chiseled "O" on the northeast curb return at Stockdale Hwy and Nord Road, Elevation 345.90-ft.

10. Owner Responsibilities:

- a. Owner will provide soils compaction testing and concrete testing. All testing to be coordinated through the Project Manager/Project Inspector. Contractor shall be responsible for the costs of retests for compaction testing.

11. Contractor Responsibilities:

- a. Contractor shall post prevailing wage rates on-site.
- b. Contractor shall submit emergency notification phone numbers.
- c. Contractor shall submit a project construction schedule
- d. Contractor to provide a copy of their U.S.A. locate number. Contractor shall expose all known utility crossings and conflicts prior to work.
- e. Contractor shall coordinate with the District for the removal of PG&E service to existing facilities.
- f. Contractor shall coordinate work with well drillers that may be conducting drilling operations during the project construction period.
- g. Contractor shall operate in accordance with his approved Dust Control Plan.
- h. Contractor shall operate in accordance with his Storm Water Pollution Prevention Plan. Contractor shall conduct routine inspections and provide annual compliance certification.
- i. Contractor shall operate in accordance with his Health and Safety Plan, perform periodic inspections, and conduct weekly safety meetings.

12. Construction Schedule:

- a. Proposed mobilization and start date - **Planning to start on Monday, January 27, 2025 however this is contingent on the approval of the DCP.**
- b. Critical construction sequencing
- c. Major equipment deliveries and priorities
- d. Provide three week look-ahead schedules (updated schedules) at each project meeting.
- e. **District will coordinate the biological and cultural trainings for Pay Dirt Construction and crew for the 1st day they are on-site.**

13. Project Completion/Clean-up:

- a. Contractor shall clean-up and restore the project site to the complete satisfaction of the Project Manager and Owner.
- b. During construction Contractor shall provide repositories for trash and other refuse and debris, and shall not allow boxes, pallets, and other packaging materials to be stored at random locations around the project site. The site shall be policed daily by the Contractor to keep it free from unsightly refuse and unsafe conditions.
- c. Final project inspection shall be performed prior to final payment.
- d. Notice of completion shall be filed and final payment released upon expiration of thirty-five calendar days after filing notice.

14. Action Items:

- a. **Matthew to provide a copy of the overall construction schedule.**



January 28, 2025

(REVISED) SEI Proposal No. 25-125

Groundwater Bank Joint Powers Authority
 C/O Dee Jasper & Associates, Inc.
 2730 Unicorn Road
 Bakersfield, CA 93308

Attention: Mr. Curtis Skaggs, PE

Subject: **PROPOSAL:** Materials Testing & Inspection Services (MT&I)
 Project: Stockdale North Recharge Basin
 Location: Near the Southeast Corner of Stockdale Highway and Enos Lane, Kern County, CA

Dear Mr. Skaggs:

We at Soils Engineering, Inc. (SEI) are pleased to provide services for this Prevailing Wage project. Our services will consist of Construction Materials Testing and Special Inspection Services, which includes Laboratory Testing. We will bill for services on Time & Materials (T&M) basis in accordance with our 2025 Fee Schedule based on your authorized representative's requests, and our experience with similar projects. We have listed our scope and estimate of charges in the following tables.

EARTHWORK					
Field Services	# of Trips	Hours/Trip	Total Hours	Rate	Cost
Compaction Testing - Full Time	10	8	80	\$ 125	\$ 10,000
Compaction Testing - Part Time	100	3	300	\$ 125	\$ 37,500
Laboratory Tests			# of Tests	Rate	Cost
Maximum Density/Optimum Moisture (Proctor) (ASTM D698 Method A or B)			10	\$ 200	\$ 2,000
Maximum Density/Optimum Moisture (Proctor) (ASTM D698 Method C)			2	\$ 250	\$ 500
Subtotal:					\$ 50,000
ADMINISTRATION					
Administrative Services			Total Hours	Rate	Cost
Project Management by Project Professional (Review Reports and Submittals)			20	\$ 155	\$ 3,100
Engineering Review By Senior Licensed Engineer			12	\$ 220	\$ 2,640
Reporting			# of Reports	Rate	Cost
Report Preparation			30	\$ 65	\$ 1,950
Subtotal:					\$ 7,690
TOTAL COST ESTIMATE:					\$ 55,540

Our cost estimate for this project is \$55,540.

PROPOSAL: Materials Testing & Inspection Services (MT&I)

(REVISED) SEI Proposal No. 25-125

Project: Stockdale North Recharge Basin

January 28, 2025

Location: Near the Southeast Corner of Stockdale Highway and Enos Lane, Kern County, CA ***Page 2***

We appreciate the opportunity to provide our services. Please contact us if you have any questions.

Respectfully submitted,

SOILS ENGINEERING, INC.



Michael Collins, BSCE, EIT-Civil Engineering
Construction Materials Manager



On Man Lau, PE, GE
Engineering Manager

Attachments: Contract and 2025 Fee Schedule

SOILS ENGINEERING, INC. Terms for Engineering, Inspection Services and/ or Materials Testing

THIS AGREEMENT

(REVISED) SEI PROPOSAL NO.: 25-125

This agreement is made by and between SOILS ENGINEERING, INC. (SEI), herein after referred to as Geotechnical Engineer, and **Groundwater Bank Joint Powers Authority**, herein after referred to as Client. This agreement between the parties consists of these terms, and the attached proposal identified as **24-125 (Materials Testing and Inspection Services for the Stockdale North Recharge Basin project, located at Near the Southeast Corner of Stockdale Highway and Enos Lane, Kern County, CA)** dated January 27, 2025 and any exhibits or attachments noted in the proposal. Together these elements will constitute the entire agreement superseding any and all prior negotiations, correspondence, or agreements either written or oral. Any changes to this agreement must be mutually agreed to in writing.

STANDARD OF CARE: The client recognizes that subsurface conditions may vary from those observed at locations where borings, surveys, or explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by the Geotechnical Engineer will be based solely on information available to the geotechnical engineer. The geotechnical engineer is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.

Services performed by the geotechnical engineer under this agreement are expected by the client to be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the geotechnical engineering profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, expressed or implied is made.

SITE ACCESS AND SITE CONDITIONS: Client will grant or obtain free access to the site for all equipment and personnel necessary for the geotechnical engineer to perform the work set forth in this agreement. The client will notify any and all possessors of the project site that client has granted geotechnical engineer free access to the site. The geotechnical engineer will take reasonable precautions to minimize damage to the site, but it is understood by client that, in the normal course of work, some damage may occur and the correction of such damage is not part of this agreement unless so specified in the proposal.

The client is responsible for the accuracy of locations for all subterranean structures and utilities. The Geotechnical Engineer will take reasonable precautions to avoid known subterranean structures, and the client waives any claim against Geotechnical Engineer, and agrees to defend, indemnify, and hold Geotechnical Engineer harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, client agrees to compensate geotechnical engineer for any time spent or expenses incurred by Geotechnical Engineer in defense of any such claim with compensation to be based upon Geotechnical Engineer's prevailing fee schedule and expense reimbursement policy.

SAMPLE DISPOSAL: The geotechnical engineer will dispose of all remaining samples after the required testing is complete unless other arrangements are made. Further storage or transfer of samples can be made at client's expense upon client's prior written request.

CONSTRUCTION MONITORING: If the geotechnical engineer is retained by the client to provide a site representative for the purpose of monitoring specific portions of the construction work as set forth in the proposal then this phrase applies. For the specified assignment, the geotechnical engineer will report observations and professional opinions to the client. No action of the geotechnical engineer or geotechnical engineer's site representative can be construed as altering any agreement between the client and others. The geotechnical engineer will report any observed work to the client which, in the geotechnical engineer's professional opinion, does not conform with plans and specifications. The geotechnical engineer has no right to reject or stop work of any agent of the client. Such rights are reserved solely for the client. Furthermore, the geotechnical engineer's presence on site does not in any way guarantee the completion or quality of the performance or the work of any party retained by the client to provide construction related services.

The geotechnical engineer will not be responsible for and will not have control or charge of specific means, methods, techniques, sequences or procedures of construction selected by any agent or agreement of the client, or safety precautions and programs incident thereto.

BILLING AND PAYMENT: The services that are agreed upon are listed in SEI proposal 24-125, dated January 28, 2025. Client will pay the geotechnical engineer the lump sum amount indicated on SEI's Proposal. If an estimate for services was provided, then all services will be billed as Time & Materials (T&M) per our referenced fee schedule in SEI proposal 24-125. Invoices will be submitted to Client by Geotechnical Engineer, and will be payable upon presentation. If client objects to all or any portion of any invoice, client will so notify geotechnical engineer in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice, not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. In the absence of written notification described above, the balance as stated on the invoice will be paid.

Invoices are delinquent if payment has not been received within thirty (30) days from the date of invoice. Client will pay an additional charge of one and one half (1.5) percent per month (or the maximum percentage allowed by law, whichever is lower) on any delinquent account, except any portion of the invoiced amount in dispute and resolved in favor of client. Payment thereafter will first be applied to accrued interest and then to the principal unpaid amount.

Client Initials _____

CONTRACT: Materials Testing and Inspection Services (MT&I)

(REVISED) SEI Proposal No. 25-125

Project: Stockdale North Recharge Basin

January 28, 2025

Location: Near the Southeast Corner of Stockdale Highway and Enos Lane, Kern County, CA

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All time spent and expenses incurred (including any attorney's fees) in connection with collection of any delinquent amount will be paid by the client to geotechnical engineer per geotechnical engineer's current fee schedules. In the event client fails to pay geotechnical engineer within sixty (60) days after invoices are rendered, client agrees that geotechnical engineer will have the right to consider the failure to pay the geotechnical engineer's invoice as a breach of this agreement.

TERMINATION: This agreement may be terminated by either party seven (7) days after written notice in the event of any breach of any provision of this agreement or in the event of substantial failure of performance by the other party, or if the client suspends the work for more than three (3) months. In the event of termination, geotechnical engineer will be paid for services performed prior to the date of termination plus reasonable termination expenses, including the cost of completing analyses, records and report necessary to document job status at the time of termination.

RISK ALLOCATION/RELEASE/INDEMNIFICATION: There are a variety of risks which potentially affect the Geotechnical Engineer by virtue of entering into an agreement to perform professional engineering services on the Client's behalf. One of these risks stems from the Geotechnical Engineer's potential for human error. In order for the Client to obtain the benefit of a fee which includes a lesser allowance for dealing with the Geotechnical Engineer's risks, the Client agrees to limit the Geotechnical Engineer's liability to the Client and to all other parties for claims arising out of the Geotechnical Engineer's performance of the services described in the agreement. The total aggregate liability of the Geotechnical Engineer will be limited to the insurance policy provided to the Client. The Client hereby releases Geotechnical Engineer for and from all claims, losses, liabilities, damages, actions, causes of action and remedies other than Client's remedy to claim and receive insurance proceeds as an additional insured under the insurance policy required by the provisions of this Agreement. Such release includes a waiver of all rights and benefits accorded by the provisions of California Civil Code Section 1542. The Client agrees to indemnify, defend and hold harmless Geotechnical Engineer, for all claims, losses, liabilities, damages, actions, causes of action and remedies arising from or in connection with Geotechnical Engineer's performance of its duties and obligations under this Agreement, including Geotechnical Engineer's acts or omissions, other than Client's remedy to claim and receive insurance proceeds as an additional insured under the insurance policy required by the provisions of this Agreement.

Limitations on liability, releases and indemnities in this agreement are business understandings between the parties and shall apply to all the different theories of recovery, including breach of contract or warranty, tort including negligence, strict or statutory liability, or any other cause of action, excepting only the sole negligence or willful misconduct of Geotechnical Engineer. The parties bound by the provisions of this Section include the Client and its officers, directors, owners, members, agents, employees, affiliates, subcontractors, successors and assigns. The parties benefited by the provisions of this Section include Geotechnical Engineer and its officers, directors, owners, members, agents, employees, affiliates, subcontractors, successors and assigns. The parties also agree that the Client shall not be entitled to seek or recover damages in excess of the above limitations indirectly through suits with other parties who may join the Geotechnical Engineer as a third party defendant.

Notwithstanding anything to the contrary contained in this Agreement, both Client and Geotechnical Engineer agree that neither party will be liable to the other, under any circumstances, for special, consequential, or punitive damages arising out of or related to this agreement or any acts or omissions of SEI.

DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS: Client warrants that a reasonable effort to inform geotechnical engineer of known or suspected hazardous materials on or near the project site has been made. Hazardous materials may exist at a site where there is no reason to believe they could or should be present. Geotechnical engineer and client agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. Geotechnical engineer and client also agree that the discovery of unanticipated hazardous materials may make it necessary for geotechnical engineer to take immediate measures to protect health and safety. Client agrees to compensate geotechnical engineer for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous waste.

The Geotechnical Engineer agrees to notify client when unanticipated hazardous materials or suspected hazardous materials are encountered. Client agrees to make any disclosures required by law to the appropriate governing agencies. Client also agrees to hold The Geotechnical engineer harmless for any and all consequences of disclosures made by The Geotechnical engineer which are required by governing law. In the event the project site is not owned by client, client recognizes that it is the client's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.

Notwithstanding any other provision of the agreement, client waives any claim against geotechnical engineer, and to the maximum extent permitted by law, agrees to defend, indemnify, and hold geotechnical engineer harmless from any claim, liability, and/or defense costs for injury or loss arising from geotechnical engineer's discovery of unanticipated hazardous materials or suspected hazardous materials including any costs created by delay of the project and any cost associated with the possible reduction of the property's value. Client will be responsible of any samples secured by the geotechnical engineer which are found to be contaminated.

Client Initials _____

CONTRACT: Materials Testing and Inspection Services (MT&I)

(REVISED) SEI Proposal No. 25-125

Project: Stockdale North Recharge Basin

January 28, 2025

Location: Near the Southeast Corner of Stockdale Highway and Enos Lane, Kern County, CA

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DISPUTES RESOLUTION: All claims, disputes, and other matters in controversy between geotechnical engineer and client arising out of or in any way related to this agreement will be submitted to "alternative dispute resolution" (ADR) such as mediation and/or arbitration, before and as a condition precedent to other remedies provided by law. If and to the extent client and geotechnical engineer have agreed on methods for resolving such disputes, then such methods will be set forth in the "Alternative Dispute Resolution" which, if attached, is incorporated and made a part of this agreement.

If a dispute at law arises related to the services provided under this agreement and that dispute arises litigation instead of ADR as provided above, then:

- (1) the claim will be brought and tried in judicial jurisdiction of the court of the county where geotechnical engineer's principal place of business is located and client waives the right to remove the action to any other county or judicial jurisdiction, and
- (2) the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorney's fees, and other related expenses.

GOVERNING LAW AND SURVIVAL: The law of the state of California will govern the validity of these terms, their interpretation and performance. If any of the provisions contained in this agreement are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired. Limitations of liability and indemnities will survive termination of this agreement for cause.

NO THIRD PARTY BENEFICIARIES: Nothing herein is intended to convey any rights to individuals or entities that are not parties to this Agreement.

The parties have read the foregoing, understand completely the terms, and willingly enter into this agreement which will become effective on the date signed by the client below.

Soils Engineering, Inc.

Groundwater Bank Joint Powers Authority

Tony M. Frangie, Vice President

By: _____ Date: _____

Date:

(Please Print Name & Title Above)



2025 FEE SCHEDULE

**Geotechnical Engineering • Geological Engineering • Environmental Engineering
Surveying • Drilling Services • Materials Testing & Inspection**

Leadership Team

L. Thomas Bayne..... President
Tony Frangie..... Vice President
On Man Lau..... Engineering Manager
Robert Becker..... Environmental Manager
Darren McCaffrey Chief Surveyor
Michael Collins Construction Materials Manager
Andrew Lucas..... Laboratory Manager



INTRODUCTION

Established in 1966 in Bakersfield, California, Soils Engineering, Inc. has successfully provided our clients with the best in professional engineering consulting, materials testing, and drilling services for geotechnical and environmental exploration.

Listed herein are prices for the most frequently performed engineering and testing services that we offer.

Sampling and testing are conducted in accordance with the latest applicable specifications of the American Society for Testing and Materials, American Association of State Highway Officials, or other pertinent agencies.

Basis for charges for 2025

Test prices shown are for laboratory work only and include reporting of routine results (not calling for recommendation or conclusion). The standard turn-around time for all laboratory testing is five (5) working days. For all expedited laboratory testing requests, an additional rush fee of fifty percent (50%) will be added. All soil samples will be discarded after test completion, unless prior arrangements have been made in advance.

Services and inspection(s) within a radius of fifty (50) miles will incur a two-hour minimum with additional time calculated in two-hour blocks thereafter. Services and inspection(s) outside of fifty (50) miles will incur a four-hour minimum with additional time calculated in two-hour blocks thereafter. Service commenced between the hours of 7:00am and 4:00pm (Monday - Friday) will be performed at the standard rates presented herein. Any services initiated outside of these hours will be billed at the appropriate rate. Services that are rendered more than eight-hours (and up to twelve) on any weekday and on Saturdays will be billed at time and a half. Services rendered more than twelve-hours on any weekday, on Holidays, on Sundays, or more than eight-hours on Saturdays will be charged at two-times the hourly rate.

Requests for copies of Geotechnical or Environmental Investigations previously completed and reported must be approved by the original client. Once approved by the client, the person requesting will be required to pay a one-time report fee of two-hundred dollars (\$200.00) prior to release of the report.

Miscellaneous expenses encountered in performance of services, such as printing and binding, permits, supplies not normally used to perform a specific job, etc. are billed at cost plus a twenty percent (20%) service fee. All heavy equipment rentals are based on a minimum charge of four hours, not including travel time.

Invoices are submitted at monthly intervals, or upon completion of the project, whichever is sooner. Engineering, project management and report preparation time will be added to invoices, as required. Payment for all work performed is due upon receipt of the invoice, unless otherwise agreed. A service fee of one and one-half percent (1.5%) per month will be added to overdue accounts thirty (30) days after the date of the original invoice.



PROFESSIONAL STAFF RATES

Senior Registered Engineer / Licensed Land Surveyor or Principal	\$220.00/hr.
Registered Engineer or Geologist, REA II	\$220.00/hr.
Project Professional	\$155.00/hr.
Staff Engineer.....	\$130.00/hr.
Staff Geologist.....	\$130.00/hr.
Expert Testimony and Special Consultation (4hr Minimum)	\$500.00/hr.
Project Administrator/Coordinator	\$90.00/hr.
Administrative Assistant/Clerical.....	\$80.00/hr.
Report Preparation/Clerical.....	\$65.00/per report

TECHNICAL STAFF RATES

Field, Laboratory, & Project Manager.....	\$105.00/hr.
Engineering Technician (Field or Laboratory).....	\$85.00/hr.
Deputy Inspector (Requires Certified Testers or Inspectors, i.e., ICC, AWS, Caltrans, etc.)	\$100.00/hr.
Non-Destructive Testing (NDT)	\$125.00/hr.

SURVEYING SERVICES

Survey Crew (1-Person).....	\$165.00/hr.
Survey Crew (2-Person).....	\$210.00/hr.
Dig Alert USA Ticket Staking / Layout	\$115.00/hr.
Surveyor Office Research & Calculations	\$130.00/hr.
Computer Aided Drafting (CAD)	\$130.00/hr.
Trimble Handheld GPS Device, & Digital Optical Level.....	\$110.00/day
Trimble R8 GPS, & Trimble VX Total Station.....	\$270.00/day
Leica C10 3D Scanner.....	\$800.00/day

DRILLING SERVICES

Drilling Services (CME 75 HT) two-man crew	\$330.00/hr.
Drilling Services (CME 45 HT) two-man crew	\$280.00/hr.

In adverse drilling conditions, the client will be responsible for replacing lost or broken equipment.



PREVAILING WAGE RATES – SOUTHERN CALIFORNIA

This Fee Schedule was developed based on determination index SC-23-63-2-2020-2D, general prevailing wage journeyman. The billing rates are subject to revision at the time of issuance of a new Determination and subsequent Determinations or Predetermined Increases for the duration of the project. The rates in effect at the time of a Determination or Predetermination shall be increased proportionally with respect to any labor and benefits rate increases mandated by the California Department of Industrial Relations.

Group 1	\$125.00/hr.
<i>Field Soils & Materials Tester, Field Asphaltic Concrete, Field Earthwork, Roof Inspector, Water Proofer</i>	
Group 2	\$130.00/hr.
<i>AWS-CWI Inspector, Building/Construction Inspector, Licensed Grading Inspector, Reinforcing Steel, Reinforced Concrete, Pre/Post-Tension Concrete, Structural Steel & Welding Inspector, Glue-Lam & Truss Joints, Truss-Type Joint Construction, Shear Wall & Floor System, Concrete Batch Plant, Spray-Applied Fireproofing, Structural Masonry</i>	
Group 3	\$135.00/hr.
<i>Non-Destructive Testing (NDT)</i>	
Survey Crew (1-Person).....	\$230.00/hr.
Survey Crew (2-Person).....	\$320.00/hr.
Drilling Services (CME 75 HT) two-man crew	\$390.00/hr.
Drilling Services (CME 45 HT) two-man crew	\$365.00/hr.

PREVAILING WAGE RATES – NORTHERN CALIFORNIA

This Fee Schedule was developed based on determination index NC-63-3-9-2020-2, general prevailing wage journeyman. The billing rates are subject to revision at the time of issuance of a new Determination and subsequent Determinations or Predetermined Increases for the duration of the project. The rates in effect at the time of a Determination or Predetermination shall be increased proportionally with respect to any labor and benefits rate increases mandated by the California Department of Industrial Relations.

Group 1	\$135.00/hr.
<i>DSA Masonry, DSA Shotcrete, Lead Inspector, NICET Level IV & NDT Level II</i>	
Group 2	\$130.00/hr.
<i>AWS-CWI, ICC Certified Structural Inspector, NICET Level III, Shear Wall/Floor System Inspector, Building/Construction Inspector</i>	
Group 3	\$125.00/hr.
<i>Geotechnical Driller, Soils/Asphalt, Earthwork Grading, Excavation & Backfill, NICET Level II</i>	
Group 4	\$120.00/hr.
<i>ACI, Drillers Helper, ICC Fireproofing, NICET Level I, Proof-load Testing, Torque Testing, NACE, NDT Level I</i>	
Survey Crew (1-Person).....	\$230.00/hr.
Survey Crew (2-Person).....	\$320.00/hr.
Drilling Services (CME 75 HT) two-man crew	\$390.00/hr.
Drilling Services (CME 45 HT) two-man crew	\$365.00/hr.



TRAVEL AND EXPENSES

Travel Time Rates.....	Hourly Rates
Vehicle Mileage Rates	\$0.70/mile
Drill Rig Mileage Rates	\$2.50/mile
Per Diem Per Person.....	Cost plus 20%
Equipment Rental or Subcontracting Charges.....	Cost plus 20%

SOIL TESTING OR INSPECTIONS

RELATIVE COMPACTION TESTS

Nuclear Gauge Method - (ASTM D2922 Soil / ASTM D2950 Asphalt)	\$10.00/test
Nuclear Gauge Method - (CTM-231 Soil / CTM-375 Asphalt)	\$10.00/test
Sand Cone Method - (ASTM D1556).....	\$10.00/test
Sand Calibration - (ASTM D1556)	\$100.00/test

DENSITY & MOISTURE DETERMINATIONS

Tube Density - (ASTM D2937)	\$20.00/test
Native Soil Moisture - (ASTM D2216 / CTM-226)	\$20.00/test
Maximum Density/Optimum Moisture (Proctor) (ASTM D1557 Method A or B)	\$200.00/test
Maximum Density/Optimum Moisture (Check Point) (ASTM D1557 Method A or B)	\$100.00/test
Maximum Density/Optimum Moisture (Proctor) (ASTM D1557 Method C)	\$250.00/test
Maximum Density/Optimum Moisture (Check Point) (ASTM D1557 Method C).....	\$125.00/test
Maximum Density/Optimum Moisture w/ Rock Correction (ASTM D1557 & D4718).....	\$350.00/test
California Impact (CTM-216)	\$250.00/test

SOIL TESTS

Sieve Analysis with # 200 Wash Test - (ASTM D422).....	\$100.00/test
Hydrometer Method - (ASTM D422).....	\$200.00/test
# 200 Wash Test Only - (ASTM D422)	\$60.00/test
Plasticity Index - (ASTM D4318)	\$200.00/test
Expansion Index - (ASTM D4829)	\$150.00/test
Specific Gravity of Soils (Vacuum) (ASTM D854)	\$200.00/test
Sand Equivalent (CTM-217)	\$100.00/test
Standard Resistance "R" Value (CTM-301)	\$300.00/test
Aggregate Base Resistance "R" Value (CTM-301)	\$350.00/test
Dispersion Test (Pin Hole) (ASTM D4647).....	\$300.00/test
Permeability Coefficient (ASTM D2434).....	\$150.00/test



Percolation Rate (Field Test)	By Quote
SO ⁴ /pH/CL/EC (Sulfate/pH/Chloride)	\$150.00/set
Minimum Resistivity (CTM 643)	\$100.00/test
Thermal Conductivity of Soils and Soft Rock by Thermal Needle Probe (ASTM D5334)	\$250.00/test

SOIL STRENGTH, SHEAR AND CONSOLIDATION TEST

Consolidation (4-Points) (ASTM D2435)	\$150.00/test
Direct Shear (3-Point Curve) (ASTM D3080)	\$200.00/test
Unconfined Compression (ASTM D2166)	\$200.00/test
Soil Strength Specimen Preparation & Testing (Cement / Lime) (Various Methods).....	By Quote

ASPHALT & AGGREGATE TESTING OR INSPECTIONS

ASPHALTIC CONCRETE TESTING

HVEEM Method Max Density Compaction (CTM-304, Set of 3, Lab Mixed)	\$300.00/set
HVEEM Method Max Density Compaction (CTM-304, Set of 3, Pre-Mixed)	\$200.00/set
Marshall Method Max Density Compaction (ASTM D1559, Set of 3, Lab Mixed)	\$300.00/set
Marshall Method Max Density Compaction (ASTM D1559, Set of 3, Pre-Mixed)	\$200.00/set
Theoretical Maximum Specific Gravity/Density (RICE) (CTM-309).....	\$175.00/test
Bitumen Content by Ignition Oven (CTM-382)	\$200.00/test
Mix Design Ignition Oven Correction Factor Determination @ 538°C or 482°C(CTM-382)	\$720.00/ea.
Moisture Content of Bituminous Mixtures (CTM-370)	\$50.00/test
Reclaimed Asphalt Paving (RAP) Oil Content (CTM-LP9).....	\$200.00/test
Reclaimed Asphalt Paving (RAP) Moisture Content (CTM-LP9).....	\$30.00/test
Bulk Specific Gravity and Density of Asphalt Cores (CTM-308)	\$20.00/ea.
Test Preparation of Drilled Asphalt Cores (Saw Cuts for Layer Separation)	\$10.00/ea.
Stabilometer "S" Value of Bituminous Mixtures (CTM-366 Set of 3 + Compaction)	\$200.00/set

AGGREGATE TESTING

Combined Aggregate Gradation (CTM-202) (ASTM C117 & C136).....	\$200.00/test
Split Coarse Aggregate Gradation (CTM-202) (ASTM C117 & C136).....	\$100.00/split
Sand Equivalent (CTM-217)	\$100.00/test
Percentage Crushed Particles (CTM-205)	\$150.00/test
Specific Gravity of Coarse Aggregate (CTM-206) (ASTM D127).....	\$100.00/test
Specific Gravity of Fine Aggregate (CTM-207) (ASTM D128)	\$150.00/test
Durability Index (DI) (Coarse) (CTM-229)	\$220.00/test
Durability Index (DI) (Fine) (CTM-229).....	\$220.00/test
Cleanness Value (CV) (CTM-227).....	\$210.00/test
Abrasion by use of LA Rattler Machine (CTM-211).....	\$350.00/test
Organic Impurities (ASTM C40)	\$100.00/test



CONCRETE / MASONRY TESTING OR INSPECTIONS

CONCRETE TESTING

Compressive Strength of Concrete Cylinders (ASTM C39 / CTM-521) (Set of 4).....	\$130.00/set
Compressive Strength of Concrete Cylinders (ASTM C39 / CTM-521) (Individual >4)	\$35.00/ea.
Flexural Test of Concrete Beams (ASTM C78).....	\$150.00/ea.
Compressive Strength of Drilled Concrete Cores (ASTM C42)	\$50.00/ea.
Test Preparation of Drilled Cores or Cast Cylinders (Saw Cuts)	\$10.00/ea.
Compressive Strength of Lightweight Insulating Concrete Cylinders (ASTM C495)	\$50.00/ea.
Unit Weight of Structural Lightweight Concrete (ASTM C567).....	\$100.00/test
Air Content of Freshly Mixed Concrete (ASTM C231).....	\$100.00/test
Concrete Moisture/Alkali Test Kit (ASTM F1869)	\$75.00/test
Concrete Relative Humidity Probe (ASTM F2170).....	\$75.00/test

MASONRY TESTING

Compressive Strength of Grout (ASTM C942) (Set of 3).....	\$130.00/set
Compressive Strength of Mortar (ASTM C109) (Set of 3)	\$130.00/set
Compressive Strength of Drilled Masonry Cores (ASTM C42).....	\$50.00/ea.
Masonry Core Shear Test.....	\$50.00/test
Compressive Strength of Grouted Masonry Prism (ASTM C1314)	\$450.00/set
Test Preparation of Grouted Masonry Prism (Saw Cutting)	By Quote
Compressive Strength of Concrete Masonry Unit (CMU) (3 Required) (ASTM C140).....	\$300.00/set
Moisture, Absorption & Unit Weight of CMU (3 Required) (ASTM C140).....	\$150.00/set
Shrinkage of CMU (3 Required) (ASTM C426).....	\$450.00/set

STRUCTURAL TESTING OR INSPECTIONS

REINFORCING STEEL

Tensile Strength & Bend Test # 3 through # 8 (ASTM A615/A706).....	\$100.00/test
Tensile Strength & Bend Test # 9 through # 11 (ASTM A615/A706).....	\$200.00/test
Tensile Strength # 14 or #18 (ASTM A615/A706).....	By Quote
Bend Test # 14 or #18 (ASTM A615/A706).....	By Quote

STRUCTURAL STEEL

Spray Applied Fireproofing Density Tests	\$100.00/test
Spray Applied Fireproofing Adhesion Tests.....	\$50.00/test
Tensile Strength (ASTM A36).....	By Quote
Bend Test (ASTM A36).....	By Quote
Sample Preparation	By Quote



STRUCTURAL BUILDING (Shear Wall / Roofing)

Shear Panel Inspection.....	By Quote
Roof Installation Inspection	By Quote
Glu-Lam Inspection	By Quote
Cut Analysis of Built-Up Roofs	\$200.00/ea.
Roof Tile Strength Test - Clay or Concrete (5 Required).....	\$100.00/test
Roof Tile Absorption Test - Clay or Concrete (5 Required)	\$60.00/test

STRUCTURAL BOLTING

Structural Bolts - Bolt/Nut/Washer (Proof Load, Tensile, Hardness).....	\$600.00/set of 3
Structural Anchor Bolts - Bolt/Nut/Washer (Proof Load, Tensile, Hardness)	By Quote

BRINELL HARDNESS

Standard Indenter for Steel or Cast Iron (F Pins) (ASTM E10)	\$50.00/ea.
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EQUIPMENT & MATERIALS

MISCELLANEOUS EQUIPMENT

Service Truck / Flat Bed Truck (Mileage Charged Separately)	\$150.00/day
Concrete/Asphalt/Masonry Coring Rig.....	\$200.00/day
Hydraulic Pull Test Equipment (Up to 24 Tons)	\$100.00/day
Hydraulic Pull Test Equipment (25 Tons to 50 Tons).....	\$200.00/day
“S” Beam Load Cell (0.5 Tons to 5 Tons)	\$100.00/day
Auto-Read Floor Profiler (Floor Flatness Dipstick)	\$400.00/day
Pachometer - Rebar Locator	\$100.00/day
Schmidt Hammer	\$100.00/day
Ultrasonic Testing Equipment.....	\$150.00/day
Skidmore-Wilhelm Device (Model MZ).....	\$250.00/day
Skidmore-Wilhelm Device (Model H)	\$300.00/day
Calibrated Torque Wrench (Large)	\$75.00/day
Calibrated Torque Wrench (Small)	\$25.00/day
Steam Cleaning Unit.....	\$200.00/day
Generator	\$100.00/day
Roto Hammer / Demo Hammer.....	\$25.00/day
Submersible Pump	\$150.00/day
Water Level Meter	\$50.00/day
Water Quality Test Meter.....	\$50.00/day
Paint Thickness Meter.....	\$200.00/day



GEOPHYSICAL TESTING & EQUIPMENT

Ground Penetrating Radar (GPR) - Noggin 100	\$700.00/site/day
Utiliguard Locating System (Ditchwitch)	\$200.00/site/day
Resistivity Meter (A-Spacings)	By Quote
Ground Rod Resistivity Meter	\$100.00/day
Downhole Geophones	By Quote
Magnetometer	By Quote
Neutron Moisture Gauge	By Quote
