

EXHIBIT A-2

Geysers Road Bridge at Frasier Creek Replacement Project Scope of Professional Engineering Services

CONSULTANT shall provide additional design, project management, bidding and construction phase services, and other assistance necessary for completion of the Project. Revisions to or new additional tasks are as follows:

PHASE I: PRELIMINARY DESIGN BASIC TASKS

Task 1.A – Kickoff Meeting, Site Visit, Field Review, Caltrans Letter, and Design Startup

No new scope for Amendment 4

Task 1.B – Surveying and Mapping

No new scope for Amendment 4

Task 1.C – Geotechnical Investigation and Report

The following will be added to Task 1.C:

In this task SUBCONSULTANT (Crawford & Associates) will perform additional Geotechnical Analysis and Investigations in support of changes to this project including modifying the geotechnical reports to address Caltrans comments of the type selection report including redesign of a narrower bridge, designing abutments as piers, redesign of the retaining wall, and the updating to current design and construction standards.

A detailed scope of services for this task for SUBCONSULTANT (Crawford & Associates) appears in Attachment B-1. Additional fee for this work is included in the fee in Attachment D.

CONSULTANT will coordinate with SUBCONSULTANT (Crawford & Associates) to review and comment on their reports and design parameters used to design and/or redesign the foundations for the bridge and retaining wall under other tasks in Phase 2.

Task 1.D – Hydrology and Hydraulics

The following will be added to Task 1.D:

In this task SUBCONSULTANT (WRECO/HDR) will perform additional hydraulic and scour analysis in support of changes to this project to address Caltrans comments of the

type selection report including additional hydraulic studies for different bridge configurations and updating the hydraulic report to reflect these changes.

The scope of this work is unchanged, just modifying prior analyses and the report to reflect the revised project configuration. Additional fee for this work is included in the fee, Attachment D.

CONSULTANT will coordinate with SUBCONSULTANT (WRECO/HDR) to review and comment on their report and will provide coordination and oversight for additional hydrology and hydraulic work required in this Amendment. CONSULTANT's coordination work will be performed under new Supplemental Task 2.B.9.4.

Task 1.E – Preliminary Alignment Study

The following will be added to Task 1.E:

In March 2023, Caltrans re-opened and reviewed the Type Selection Report and requested that the County re-evaluate options to reduce the bridge costs which included variations to the alignment and reduction of shoulders, as well as shortening the proposed bridge. This requires revising the preliminary alignment 30% drawings including the typical sections, layouts, and profile drawings. CONSULTANT's coordination work will be performed under new Supplemental Task 2.B.9.4.

Task 1.F – Bridge Preliminary Report

No new scope for Amendment 4. Design changes will be directly reflected in the revised Type Selection Report.

Task 1.G – Preliminary Bridge Design (Structure Type Selection)

The following will be added to Task 1.G:

A bridge type selection report was prepared and submitted to the County in 2015 and submitted to Caltrans in December 2020. At that time, the report was reviewed and the County received emails from Caltrans that they had no further comments on the report. In the Spring of 2023, Caltrans realized that a Type Selection Meeting was never held and re-opened and re-reviewed the Type Selection Report. A Caltrans Type Selection Meeting was held in July 2023 in which Caltrans presented comments to the COUNTY and the CONSULTANT. Over the past year, the County made a request to the CONSULTANT to amend the bridge type selection report. The report will be amended to address Caltrans Comments for the County to submit to Caltrans for approval. Caltrans has requested additional changes to the report including the following:

- Cost analysis for two structure lengths, 80' and 60'. CONSULTANT will study three superstructure types (precast concrete, steel girders, and cast in place (2-span and 3-span) concrete slab,
- Justify the structure length and reduce to the minimum needed
- Resolve the issues regarding the design of the abutment foundations to address potential scour and channel migration
- The hydraulic report would need to be updated to reflect the new bridge

- configuration. Refer to Task 1.D
- The draft geotechnical report would need to be updated to reflect foundation types for the new bridge configuration. Refer to Task 1.C
 - Revise the Type Selection Report to address Caltrans comments, as noted above.

It is assumed herein that Caltrans will ultimately approve the 80' bridge length as originally submitted, and that the only changes to the report will reflect the narrowed width and updated cost estimates for both the 80' and 60' lengths, but incorporation of revised geotechnical and hydraulic report information only for the 80' length.

Work shall be reimbursed under new Supplemental Task 2.B.9.4.

Task 1.H – Bridge General Plan

The following will be added to Task 1.H:

To address Caltrans comments from the Type Selection Report, the CONSULTANT will modify the bridge general plan to meet current standards. The retaining wall at the southwest corner of the bridge will be modified, re-detailed on the bridge general plan, and included in the updated type selection report. Work shall be reimbursed under new Supplemental Task 2.B.9.4.

Task 1.I – Environmental Coordination

The following will be added to Task 1.I:

With the changes to the project as a result of the bridge geometrics revisions as noted in the previous tasks, the environmental document would need to be re-studied to document the impacts. Additional scope to assist the COUNTY in preparation of the CEQA studies will be required. This includes preparing supporting calculations for environmental impacts, exhibits, and ongoing coordination with the COUNTY to complete the CEQA process.

Task 1.J – Environmental Technical Studies

No new scope for Amendment 4

Task 1.K – Initial Site Assessment

No new scope for Amendment 4

Task 1.L – Preliminary Engineering Report

No new scope for Amendment 4. A revised report will not be prepared.

Task 1.M – Meetings

The following will be added to Task 1.M:

Preparation for and attendance at two additional virtual meetings with the COUNTY and/or Caltrans are included for the revisions to the Type Selection Report.

Task 1.N – Project Management and Coordination

No new scope for Amendment 4. Additional project management and coordination work will be performed under Task 2.J.

Task 1.O – Additional Cultural Studies

No new scope for Amendment 4

PHASE II FINAL DESIGN BASIC TASKS

Upon receiving written approval of this amendment from the COUNTY, the final design of this project will continue. CONSULTANT will incorporate the design changes and updates to the current standards for design and construction as described below. The following tasks explain the work necessary to incorporate these changes and the changed scope work to be performed.

Design will incorporate COUNTY Standard Plans; standards per Caltrans Local Assistance Procedures, Highway Design and Traffic Manuals; most current applicable Caltrans Standard Plans and Specifications, the current AASHTO Green Book Standards, and the AASHTO Low Volume Roads guide specification, will be those in effect as of April 2024. New standards or modifications to standards which occur going forward may require redesign of particular project features. In this case, COUNTY agrees to compensate CONSULTANT for extra work which is required to meet the new or modified standards.

The project plans will be prepared incorporating as necessary the applicable 2023 Caltrans Standard Plans. The project Special Provisions will be prepared using the 2023 Caltrans Standard Specifications and associated Standard Special Provisions. The COUNTY agrees to obtain any exception required from Caltrans to avoid the use of subsequently dated Caltrans standards.

The project Construction Estimate (Bid Item List) will be prepared using the current Caltrans Construction Contract Development Guide, version 10.0, dated July 30, 2022, and the Caltrans Bid Items List (Coded Contract Items) dated January 22, 2024.

Design work will be accomplished utilizing English units of measure. Required subconsultant scopes are included in Attachment B. The schedule will be as included in Attachment C. The following basic tasks will be performed and reimbursed in accordance with the fee included in Attachment D.

Where no new scope is indicated for a task or subtask, and the task or subtask has not been commenced or is not complete, the unused or remaining budgets for all such tasks and subtasks will be increased to reflect the new hourly rates listed in Attachment D. A rate change will not be applied to previously completed work.

Task 2.A – Final Design Startup

No new scope for Amendment 4.

Task 2.B – Approach Design Work

Task 2.B.1 – Roadway Civil Design

Revise roadway plans to reflect the reduced roadway width and changed retaining wall configuration.

Task 2.B.2 – Traffic Design

Modify stage construction and traffic handling plans to reflect the reduced roadway width.

Task 2.B.3 – Utility Coordination/Design

No new scope for Amendment 4

Task 2.B.4 – Channel Protection Design

No new scope for Amendment 4

Task 2.B.5 – Culvert Replacement Design

No new scope for Amendment 4. Work will be done under the contingency budget if ultimately deemed necessary.

Task 2.B.6 – Retaining Wall and Geogrid Embankment Design

Revise the retaining wall design to the new location due to the reduction in the roadway width.

Task 2.B.7 – Revegetation Design

SUBCONSULTANT FIRMA Design Group will prepare mitigation planting design PS&E. The County will provide the agreed upon mitigation requirements developed during the environmental process and provide the MMRP to CONSULTANT.

Task 2.B.8 – Stormwater Pollution Prevention and Erosion Control Plans

Modify Erosion Control plans for the reduced roadway width.

Task 2.B.9 Drainage System and Water Quality Low Impact Development (LID) Design

CONSULTANT will revise drainage plans for the narrower roadway. New calculations will not be prepared, just revising plans to show the changed locations of facilities moved inward due to narrowing of the road and bridge.

Task 2.B.9.4 – Revise Project Configuration and Type Selection Report

CONSULTANT shall prepare a revised type section report as described under Tasks 1.C-1.N above.

Task 2.C – Bridge Design Work

As a result of preliminary engineering and environmental efforts, the bridge clear width is reduced from 32' to 24', and the southwest retaining wall configuration will be changed. The structure will be constructed in one stage, using a temporary bridge. Approach slabs (10' in length) will be designed at each abutment.

Task 2.C.1- General Plan Approval

The Bridge General Plan will be revised to reflect the approved type selection.

Task 2.C.2- Bridge Design and Detailing

Update the 30% design, bridge design, and design plans for the revised project configuration and to the latest design standards as identified in this amendment. This includes evaluating seismic design with a new ARS curve and the requirements of SDC 2.0 and AASHTO LRFD 8th edition with Caltrans Amendments.

Task 2.C.3- Bridge Design Check

No new scope for Amendment 4

Task 2.D – 30% and 60% Plans Submittal

Revise the 30% and 60% plans to reflect the reduced roadway and bridge width and changed project configuration.

Task 2.E – Specs and Cost Estimate

No new scope for Amendment 4, however 2023 standards will be used.

Task 2.F – Quality Control

No new scope for Amendment 4

Task 2.G – Draft PS&E Submittal

No new scope for Amendment 4

Task 2.H – Permits

No new scope for Amendment 4

Task 2.I – Final PS&E

No new scope for Amendment 4.

Task 2.J – Project Management/Coordination

The scheduled completion date was extended because of environmental delays and as a result, the project management task is being extended for an additional year. This task consists of the direction of the work; attendance at two (2) additional virtual meetings with COUNTY, or other interested agencies in this Phase II, including those listed in all tasks herein; project coordination with the COUNTY, affected agencies, telephone coordination and conferences; monitoring schedule and budget performance; and preparing monthly progress reports, invoices, and schedule updates for the COUNTY.

Task 2.K – Bid Phase

No new scope for Amendment 4

PHASE III: CONSTRUCTION SERVICES

Upon approval by the COUNTY, the CONSULTANT will be available to interpret plans, revise designs, check and accept shop drawings and falsework plans, and make site visits during construction. Tasks are listed below. Due to the indeterminate nature of the work, all work shall be reimbursed on a time and materials basis during this phase.

TASK 3.A Preconstruction Meetings and Project Kickoff Activities

One member of the CONSULTANT's staff shall prepare for and attend an initial team meeting and a subsequent formal preconstruction meeting with the COUNTY, the CONTRACTOR, and the COUNTY's construction management firm. CONSULTANT shall also send the R.E. Pending File and Supplemental Project Information, prepare and send a template for RFIs, and set up administrative and accounting systems.

TASK 3.B Respond to Contractor RFIs

CONSULTANT shall respond to RFIs from the Contractor during construction. It is expected that the CONSULTANT will receive the RFI directly from the Resident Engineer on behalf of the COUNTY. RFIs will be provided in a standard format in Microsoft WORD. CONSULTANT will respond to the RFI and return response the Resident Engineer in a PDF format. The COUNTY will be cc'd on RFI responses.

TASK 3.C Submittal Reviews

The CONSULTANT will review and provide comments on shop plans through the Resident Engineer. Submittals are anticipated to include:

Pile Placement Plans

Temporary Bridge Plans and Specifications

Barrier Rails

Concrete Mix Designs

It is assumed that the COUNTY or its R.E. will review other submittals, although CONSULTANT can review any submittal with appropriate compensation.

TASK 3.D Change Order Assistance

CONSULTANT shall assist in evaluating or modifying existing plans and specifications for incorporation into change orders prepared by the COUNTY.

TASK 3.E Site Visits

One member of the CONSULTANT's staff shall prepare for and attend the preconstruction meeting with the COUNTY, the CONTRACTOR, and the COUNTY's construction management firm. CONSULTANT shall attend a maximum of three (3) additional site visits to observe critical construction activities or as may be requested by the COUNTY. Additional site visits shall be reimbursed as Additional Services.

TASK 3.F Project Management and Caltrans Coordination

CONSULTANT shall manage the work related to this Amendment #4 including quality control of deliverables, documentation, maintaining files, and preparing monthly progress reports.

CONSULTANT shall provide additional coordination with Caltrans Local Assistance. Work shall include input to a COUNTY-prepared LAPM/G Exhibit 3A/6D funding request package and coordination efforts to attempt to secure the additional HBP funding to cover the costs of higher than estimated construction costs including construction engineering work required hereunder.

TASK 3.G Geotechnical Observation

CONSULTANT shall provide geotechnical services by observing foundation construction and answering questions related to geotechnical considerations, to the extent of budget for this task including that for subconsultant Crawford Associates.

TASK 3.H Environmental Coordination

CONSULTANT will provide consultation regarding resource agency requirements or requests for information. It is understood that the CONSTRUCTION CONTRACTOR and its Contractor-supplied Biologist are responsible for obtaining any permits required for construction in addition to those the COUNTY has obtained.

TASK 3.I Prepare As-Built Plans

CONSULTANT will prepare As-built Plans at the conclusion of the construction activities to reflect the as-built construction details. Changes will be made based on the COUNTY's R.E.s marked up "rack" plan set, with CCOs added.

EXPENSES

CONSULTANT will be reimbursed for travel and other direct costs.

SUPPLEMENTAL SERVICES

The following tasks are not authorized unless written approval from the COUNTY is given to the CONSULTANT.

No new scope for Amendment 4

COUNTY-PERFORMED SERVICES

Certain additional services will be performed by the COUNTY as part of this Amendment. Some of these are listed below. This list is not all-inclusive.

1. Low Impact Development (LID) Report and Calculations (Task 2.B.9)
2. Riparian Mitigation Monitoring and Maintenance Plan
3. NEPA and CEQA Environmental Document and Studies
4. Permit applications

ATTACHMENTS TO EXHIBIT A

- A. Intentionally Left Blank
- B. Subconsultants Scope of Work
- C. Schedule
- D. Fee Proposal

Attachment A

INTENTIONALLY LEFT BLANK

Attachment B

SUBCONSULTANT SCOPES OF WORK

Attachment B-1

Crawford & Associates

The retaining wall at the southwest corner of the bridge extending behind Abutment 1 and parallel to Geysers Road will be modified. The wall foundations will be stepped and the higher wall sections supported on cast-in-drilled-hole (CIDH) piles with shorter (end) section supported on a shallow foundation established within new fill. Also, the abutments will be designed as piers. Crawford & Associates, Inc (CA, Inc.) has completed a Preliminary Foundation Report in 2020 for this project. Field exploration completed for this project includes test borings and seismic survey.

Based on the foregoing, additional geotechnical services to update and complete the Foundation Report include the following:

- Provide revised recommendations for the new retaining wall configuration.
- Provide recommendations for abutment piles design as a piers.
- The results will be summarized and incorporated into the Foundation Report.

Attachment B-2

WRECO

Task 1 Bridge Design Hydraulic Study Update

WRECO/HDR will update their hydraulic analysis for the narrower bridge, as well as update design information for abutments designed as piers. WRECO will update the Bridge Design Hydraulic Study report to document the results of the analyses.

Deliverables:

Revised Final Bridge Design Hydraulic Study (PDF)

Attachment C

SCHEDULE

Certify R/W (by COUNTY)	August 2024 (or earlier)
Updated 30% Submittal	August 1, 2024
65% PSE Submittal	August 30, 2024
95% PSE Submittal	October 15, 2024
Respond to Constructability Review	November 15, 2024
100% PSE	December 10, 2024
Caltrans Submittal	October 15, 2024
Begin Bid Phase Support	February 2025
Begin CON Phase Support	June 2025

Attachment D
PAYMENT PROVISIONS

Attachment D

PAYMENT PROVISIONS FOR BRIDGE REPLACEMENT ON GEYSERS ROAD AT FRASIER CREEK

SPECIFIC RATES OF COMPENSATION – BASIC SERVICES - PE

*Replace this Section of the agreement with the following:

1. CONSULTANT will be reimbursed for hours worked at the hourly rates specified in CONSULTANT's Rate Schedule attached hereto and in accordance with the attached Design Fee Estimate worksheet. The specified hourly rates shall include direct salary costs, employee benefits, overhead, and fee. These rates are adjustable annually on January 1 of each year as indicated.
2. In addition, CONSULTANT will be reimbursed for incurred (actual) direct costs other than salary costs that are identified in the fee proposal.
3. Reimbursement for transportation and subsistence costs shall not exceed the current IRS or State of California reimbursable rates.
4. Progress payments will be made monthly in arrears based on services provided and actual costs incurred.
5. The total amount payable by COUNTY for basic services under the original agreement, first, second, and third amendments, and this fourth amendment shall not exceed the sum of \$862,425 unless authorized by approval of all or a portion of the contingency budget or an amendment to the Agreement.

SPECIFIC RATES OF COMPENSATION – SUPPLEMENTAL SERVICES

*Replace this Section of the agreement with the following:

The basis of payment for the supplemental services provided under this agreement shall be at the standard hourly rates specified in CONSULTANT's Rate Schedule attached hereto. The fee shall be negotiated for each individual supplemental service.

1. The County shall reimburse the Consultant at standard hourly rates as listed in the attached Rate Schedule.
2. The Consultant shall be reimbursed for actual travel expenses incurred in accordance with paragraph 3 under Basic Services.
3. The total amount payable by COUNTY for supplemental services under the original agreement, first, second, and third amendments, and this fourth amendment shall not exceed the sum of \$100,695 unless authorized by approval of all or a portion of the contingency budget or an amendment to the Agreement.

SPECIFIC RATES OF COMPENSATION – BASIC SERVICES – CON PHASE

*Add this Section to the agreement:

1. CONSULTANT will be reimbursed for hours worked at the hourly rates specified in CONSULTANT's Rate Schedule attached hereto and in accordance with the attached Construction Phase Fee Estimate worksheet. The specified hourly rates shall include direct salary costs, employee benefits, overhead, and fee. These rates are adjustable annually on January 1 of each year as indicated.
2. In addition, CONSULTANT will be reimbursed for incurred (actual) direct costs other than salary costs that are identified in the fee proposal.
3. Reimbursement for transportation and subsistence costs shall not exceed the current IRS or State of California reimbursable rates.
4. Progress payments will be made monthly in arrears based on services provided and actual costs incurred.
5. The total amount payable by COUNTY for basic services under this fourth amendment shall not exceed the sum of \$144,527 unless authorized by approval of all or a portion of the contingency budget or an amendment to the Agreement.

**TRC ENGINEERS, INC.
COST PROPOSAL - BASIC SERVICES**

**EXHIBIT 10-H
(Basic PE)**

PROJECT County of Sonoma
Professional Engineering Services for Geysers Road
Bridge at Frasier Creek - Amendment 4 PE + CON

DIRECT LABOR

<u>Employee</u>	<u>Function</u>	<u>Hours</u>		<u>Hourly Raw Rate</u>	<u>Total</u>	
M.Imbriani	Principal In Charge	36	@	\$105.04	\$3,781	
J.Conklin	Project Manager	62	@	\$82.53	\$5,117	
Staff	Senior Project Specialist	0	@	\$0.00	\$0	
Staff	Project Engineer	63	@	\$75.03	\$4,727	
Staff	Senior Engineer	32	@	\$60.02	\$1,921	
Staff	Engineer II	221	@	\$48.76	\$10,776	
Staff	Engineer I	47	@	\$41.26	\$1,939	
Staff	CADD Supervisor	50	@	\$56.27	\$2,814	
Staff	CADD Technician	132	@	\$39.39	\$5,199	
Staff	Desktop Publisher	0	@	\$31.89	\$0	
Staff	Admin Assistant	1	@	\$31.89	\$32	
	Escalation Factor In New Rates				\$290	
					\$0	
Total Direct Labor Costs					644	\$36,596.33

INDIRECT COSTS

	Fringe Benefits Rate	0.00%
	Overhead Rate	155.00%
	Other	0.00%
Overhead		155.00%
	Total Indirect Costs	\$56,724.31

OTHER DIRECT COSTS

<u>Item</u>	<u>Quantity</u>	<u>Per Unit</u>	<u>Total</u>
Mileage		\$0.65	
Postage		\$20.00	
Reproduction		\$0.07	
Per Diem		\$41.00	
Lodging		\$200.00	
Escalation	0	\$1.000	\$0
k	0	\$0.000	\$0
p	0	\$0.000	\$0
n	0	\$0.000	\$0
t	0	\$0.000	\$0
i	0	\$0.000	\$0
	Total Other Costs		\$0.00

FEE (Profit)

0% \$0.00

SUBCONTRACTOR COSTS (detailed cost estimate attached)

<u>Subconsultant</u>	<u>Discipline</u>	<u>Fee</u>
Crawford	CE - Geotechnical	\$15,742.00
WRECO/HDR	CE - Hydraulics	\$5,000.00
Firma Design Group	PE - Revegetation	\$7,479.00
Adobe Associates	Surveys	
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
<u>Total Subcontractor Costs</u>	0	\$28,221.00
		\$0

TOTAL COST

\$121,541.63

**TRC ENGINEERS, INC.
COST PROPOSAL - CON PHASE**

**EXHIBIT 10-H
(Basic-CON)**

PROJECT County of Sonoma
Professional Engineering Services for Geysers Road
Bridge at Frasier Creek - Amendment 4 PE + CON

DIRECT LABOR

<u>Employee</u>	<u>Function</u>	<u>Hours</u>		<u>Hourly Raw Rate</u>	<u>Total</u>
M.Imbriani	Principal In Charge	41	@	\$105.04	\$4,307
J.Conklin	Project Manager	80	@	\$82.53	\$6,602
Staff	Senior Project Specialist	0	@	\$0.00	\$0
Staff	Project Engineer	156	@	\$75.03	\$11,705
Staff	Senior Engineer	100	@	\$60.02	\$6,002
Staff	Engineer II	140	@	\$48.76	\$6,826
Staff	Engineer I	0	@	\$41.26	\$0
Staff	CADD Supervisor	16	@	\$56.27	\$900
Staff	CADD Technician	24	@	\$39.39	\$945
Staff	Desktop Publisher	0	@	\$31.89	\$0
Staff	Admin Assistant	16	@	\$31.89	\$510
Escalation Factor In New Rates					\$949
					\$0
Total Direct Labor Costs		573			\$38,746.77

INDIRECT COSTS

	<u>Rate</u>	
Fringe Benefits Rate	0.00%	
Overhead Rate	155.00%	
Other	0.00%	
Overhead	155.00%	
Total Indirect Costs		\$60,057.49

OTHER DIRECT COSTS

<u>Item</u>	<u>Quantity</u>	<u>Per Unit</u>	<u>Total</u>
Mileage	1000	\$0.65	\$650
Postage	4	\$20.00	\$80
Reproduction	500	\$0.07	\$35
Per Diem	8	\$41.00	\$328
Lodging	4	\$200.00	\$800
k	0	\$0.000	\$0
p	0	\$0.000	\$0
n	0	\$0.000	\$0
t	0	\$0.000	\$0
i	0	\$0.000	\$0
Total Other Costs			\$1,893.00

FEE (Profit)

10% \$9,880.43

SUBCONTRACTOR COSTS (detailed cost estimate attached)

<u>Subconsultant</u>	<u>Discipline</u>	<u>Fee</u>
Crawford	CE - Geotechnical	\$23,949.37
WRECO/HDR	CE - Hydraulics	\$5,000.00
Firma Design Group	CE	\$5,000.00
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
Total Subcontractor Costs		\$33,949.37

TOTAL COST

\$144,527.06

Escalation Calculation (Basic Services)

Employee	Actual Employee Rate	Hours on Project	% of Project	Weighted Portion of Rate
Principal In Charge	\$ 105.04	36	5.59%	\$5.87
Project Manager	\$ 82.53	62	9.63%	\$7.95
Senior Project Specialist	\$ -	0	0.00%	\$0.00
Project Engineer	\$ 75.03	63	9.78%	\$7.34
Senior Engineer	\$ 60.02	32	4.97%	\$2.98
Engineer II	\$ 48.76	221	34.32%	\$16.73
Engineer I	\$ 41.26	47	7.30%	\$3.01
CADD Supervisor	\$ 56.27	50	7.76%	\$4.37
CADD Technician	\$ 39.39	132	20.50%	\$8.07
Desktop Publisher	\$ 31.89	0	0.00%	\$0.00
Admin Assistant	\$ 31.89	1	0.16%	\$0.05
		644	100.00%	\$56.38

< Weighted Average Raw Rate

Year		Est hours spent per year	Est % spent per year	Unescalated Ave. Rate	Escalation	Escalated Ave. Rate	Total Unescalated Labor	Total Escalated Labor	Escalated Labor by Year
August 2024 to Dec 2024	Design	386.4	60%	\$56.38					
Jan 2025 to Dec 2025	Design	257.6	40%	\$56.38	2.0%	\$57.50	\$14,522	\$14,813	\$290
	Design	0.0	0%	\$56.38	2.0%	\$58.65	\$0	\$0	\$0
		644	100%				\$14,522	\$14,813	\$290

Escalation Calculation (Supplemental Services)

Employee	Actual Employee Rate	Hours on Project	% of Project	Weighted Portion of Rate
Principal In Charge	\$ 105.04	41	7.16%	\$7.52
Project Manager	\$ 82.53	80	13.96%	\$11.52
Senior Project Specialist	\$ -	0	0.00%	\$0.00
Project Engineer	\$ 75.03	156	27.23%	\$20.43
Senior Engineer	\$ 60.02	100	17.45%	\$10.47
Engineer II	\$ 48.76	140	24.43%	\$11.91
Engineer I	\$ 41.26	0	0.00%	\$0.00
CADD Supervisor	\$ 56.27	16	2.79%	\$1.57
CADD Technician	\$ 39.39	24	4.19%	\$1.65
Desktop Publisher	\$ 31.89	0	0.00%	\$0.00
Admin Assistant	\$ 31.89	16	2.79%	\$0.89
	\$ -	0		
		573	100.00%	\$65.97

< Weighted Average Raw Rate

Year		Est hours spent per year	Est % spent per year	Unescalated Ave. Rate	Escalation	Escalated Ave. Rate	Total Unescalated Labor	Total Escalated Labor	Escalated Labor by Year
2024	Design	0.0	0%	\$65.97					
2025	Design	429.8	75%	\$65.97	2.0%	\$67.28	\$28,349	\$28,916	\$567
2026	Design	143.3	25%	\$65.97	2.0%	\$68.63	\$9,450	\$9,831	\$382
		573	100%				\$37,798	\$38,747	\$949