SUPPLEMENTAL SERVICES AGREEMENT NO. 2 CAPITAL PROJECT MANAGEMENT SERVICES

THIS SUPPLEMENTAL SERVICES AGREEMENT NO. 2, hereinafter referred to as							
Supplemental Agreement, is made and entered into this day of, 2025, by							
and between the County of Lake, hereinafter referred to as COUNTY, and Vanir Construction							
Management, Inc., hereinafter referred to as CONSULTANT:							
<u>WITNESSETH</u> :							
WHEREAS, the COUNTY has entered into a General Services Agreement dated							
June 18, 2024 , with CONSULTANT to perform services in support of project							
delivery of capital projects; and,							
WHEREAS, the COUNTY and CONSULTANT now desire to also enter into this							
Supplemental Agreement with the scope of services described herein for Construction							
Management, Support, and Close Out services on the Sheriff Administration Facility Project.							
NOW, THEREFORE, IN CONSIDERATION OF the covenants and agreements herein							
set forth, it is hereby agreed:							
1. The General Services Agreement remains in full force and effect, and in the							
performance of this Supplemental Agreement CONSULTANT is held to all							

provisions and the terms of the General Services Agreement.

2. PROJECTS

The project covered by this Supplemental Agreement shall include the following:

Construction Management, Support, and Close Out services related to the adaptive reuse of the former

National Guard Armory to a Lake County Sheriff Administration Facility.

3. SCOPE OF WORK

The scope of work covered by this Agreement is described in the Scope of Work and Cost Proposal prepared by CONSULTANT, which is attached as Exhibit "A".

4. COMPENSATION

As full compensation for all work or services to be provided by CONSULTANT hereunder, County shall make payments to CONSULTANT based on monthly invoices for all services performed under this Agreement. Invoices shall reference the project title and include a detailed breakdown to support billable hours and work items completed to date and the cost of work remaining. Invoices shall be separate for each facility. Payment will be based on time and materials. Invoices are due and payable upon receipt. The total fee for the project will not exceed \$665,753.00 without prior approval of the County. Upon satisfactory completion of services summarized in Attachment "A", the final payment of any balance will be due upon receipt of the final invoice. The final invoice shall be submitted within 60 calendar days after completion of the CONSULTANT's work.

In the event of a disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. COUNTY will exercise reasonableness in contesting any bill or portion thereof. No interest will accrue on any contested portion of the billing until mutually resolved.

If COUNTY fails to make payment in full to CONSULTANT for services within sixty (60) days of the date due for any uncontested billing, CONSULTANT may, after giving seven (7) days written notice to COUNTY, suspend services under this Agreement until paid in full, including interest. In the event of suspension of services, CONSULTANT will have no liability to COUNTY for delays or damages caused COUNTY because of such suspension of services.

5. TERM

CONSULTANT shall begin immediately on the work as assigned and this AGREEMENT shall remain in full force for a period of two (2) years from the date of approval or until terminated by either party.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT the day and year first written above.

County of Lake, a political subdivision of the State of California	CONSULTANT
ByChair, Board of Supervisors	Vanir Construction Management, Inc.
ATTEST: SUSAN PARKER CLERK TO THE BOARD	APPROVED AS TO FORM: LLOYD GUINTIVANO COUNTY COUNSEL
By	By: Pamela andberg

EXHIBIT A



January 10, 2025

Mr. Lars Ewing

Public Services Director Lake County Public Services 333 Second Street Lakeport, CA 95453

Subject: Vanir Construction and Closeout Proposal for the Design-Bid-Build Procurement of the

Remodel of the National Guard Armory to Sheriff Administration Facility

Dear Lars,

As requested, Vanir Construction Management, Inc. (Vanir) is pleased to submit the Construction and Closeout CM Services proposal for the Remodel of the National Guard Armory to Sheriff Administration Facility project. Also included are RGH Geotechnical Construction Observation and Testing & Special Inspections costs, and 3QC Commissioning costs. Also please see attached associated Vanir Staffing Plan, Vanir Scope of Work, and RGH and 3QC Proposals.

RGH Consultants

Geotechnical Construction Ob Testing & Special Inspections	\$44,500* \$91,700*	
3QC - Commissioning		\$39,399
	Subtotal	\$175,599
Vanir Markup (5%)		\$8,780
Vanir CM Services		\$481,374
	Total	\$665,753

^{*}RGH Consultants proposal contains 10% contingency Vanir will contract with language requiring Lake County/Vanir approval to utilize.

Please contact me if you have any questions.

Very Truly Yours,

Myance Drupes

Lance Durfee - Senior Project Director, Vanir CM



4540 Duckhorn Drive / Suite 300 Sacramento, CA 95834 TEL 916-575-8888 FAX 916-575-8887 www.vanir.com

Lake County Sheriff Admin Remodel Project
Vanir PM/CM Services Construction & Closeout Scope of Work

Scope of Services

I. General

- Provide efficient Project and Construction Management services, supplementing Lake County Public Services Department providing their in-house PM/CM Services utilizing County Staff. Consistent with the best interests of Lake County and the Sheriff Admin Remodel Project, manage schedule, budget, scope, and requisite quality per the Lake County objectives and Construction Documents.
- Develop Construction Project Procedures Manual, Communications Plan, and Risk Management Plan, etc. **Deliverables: PPM**

II. Construction & Closeout Phase

A. Construction

- Monitor and report General Contractor's progress. County primary on site.
- Review General Contractor compliance with CEQA MMRP's.
- Advise when to stop Work due to Defective Work.
- As needed require General Contractor to furnish satisfactory evidence as to the kind and quality of materials and equipment.
- Maintain daily digital progress photos. Deliverable: Progress Photos (County Prime)
- Provide Monthly Progress Reports, summarize current project status relating actual to
 planned status, provide executive summary, identify percentage complete, schedule status,
 budget, proposed, pending and approved change orders with respective value and time
 impacts, issues logs, deficiency logs, and recommendations. Deliverable: Monthly Reports
- Track and report project budget identifying cash flow, status of funding, encumbrances, actual expenditures, and estimated cost at completion, forecast budget surpluses and deficits. Deliverable: Budget Status Reports
- Validate and negotiate scope changes and costs of change proposals. County Prime/Vanir
 Support
- When appropriate, provide independent estimates for various changes to negotiate fair and reasonable pricing; provide written recommendations to accept or reject General Contractor proposed contract modifications with supporting independent estimates.
 Deliverable: Independent Estimate, Technical Analysis, and written acceptance recommendations; County Prime/Vanir Secondary



- Maintain project files, contracts, drawings, specifications, addenda, change orders, and other modifications, approved shop drawings, product data, sample and required submittals. Deliverable: Project Files
- Log, review, and maintain General Contractor RFI's, Contractor Proposal Requests, and Change Orders. Deliverable: Hard and Electronic files of RFI and CO/COR Logs
- Review General Contractor RFI's between Contractor and Designers and make recommendations as appropriate.
- Confirm General Contractor submittal schedule is satisfactory coordinated with Contract Schedule. **Deliverable: Submittal Log Review Report**
- Receive, route for Design of Record review Submittals, Shop Drawings, Product Data, Samples, etc.
- In conjunction with the quality control plan, judge the acceptability of all testing and inspection performed by General Contractor.
- Review all revisions and changes prior to the Design Professionals preparation of the final Record Documents.
- Provide written recommendation to accept or reject contractor claims with supporting analysis and documentation. Deliverable: Written Reports
- Provide written recommendations to accept or reject General Contractor CPM Schedule, provide monthly audit of General Contractor schedule, and provide monthly recommendations regarding changed conditions adjustments or actions. Deliverable:
 Schedule Review Reports
- Provide written minutes of weekly and as-needed General Contractor progress meetings.
 Deliverable: Meeting Minutes
- Ensure General Contractor compliance with contract requirements.
- Administer and coordinate third-party Commissioning contract and coordinate with General Contractor.
- Administer and coordinate Special Inspections. County Prime
- Coordinate between General Contractor and Lake County site security and access. County
 Prime
- Coordinate between General Contractor and Lake County acceptance inspections, testing, and demonstrations, etc. County Prime
- Review/approve Cost Breakdown (schedule of values) submitted by General Contractor, used for Application of Payments. Deliverable: Written Review of Schedule of Values
- As required request invoices, certified payrolls, daily time and material records in conjunction with reviewing/approving Application for Payment.
- Review and approve General Contractor Application for payment. Deliverable: Written
 Review of Application for Payment
- Approve for inclusion in the Application for Payment, the cost of materials not yet incorporated into work.
- Make an inspection of the Work for Beneficially Occupy and prepare a list of items to be completed and corrected prior to Final Completion. Deliverable: Punch List



- Determine and advise when the Work is "Substantially Complete" except for completion of minor items.
- Develop Lake County punch list and facilitate resolution with General Contractor incomplete or non-compliant work. **Deliverable: Punch List and status reports**
- Prepare a Certificate of Substantial Completion for approval by Lake County. Deliverable:
 Certification of Substantial Completion

B. Closeout Phase

- Advise when to accept Final Completion.
- Issue the final Certificate for Payment. Deliverable: Final Certificate for Payment
- Advise when to declare Defective Work during the Work or during the Guarantee To Repair Period.
- Provide written recommendation of rejection or acceptance of completed work, and recommendation of releasing final payment and issuing Notice of Completion to General Contractor. Deliverable: Notice of Completion
- Provide written report identifying all warranty items, lengths of warranty periods, and names and addresses of contact personnel. Deliverable: Warranty Report
- During project closeout, provide final written report including: final cost of project, explanation of any deviations from original estimated cost, summary of schedule and actual completion dates and explanation of any deviations from the original estimated dates.
 Deliverable: Final Report
- Facilitate turnover of closeout deliverables, as-builts, warranties, training, O&Ms, spare parts, etc.



Lake County Remodel of the National Guard Armory to Sheriff Administration Facility Project and Construction Management Services Construction and Closeout Phase 1/10/2025

							20	25								
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Bill Rates	Total
Title						Co	nstruction	(16 Month	ıs)							
Project Director	Lance Durfee	8	8	8	8	8	8	8	8	8	8	8	8	96	249.00	23,904
Project Manager	Keith Burnham	50	50	50	50	50	50	50	50	50	50	50	50	600	212.00	127,200
Construction Manager	Jessica Herron	65	65	65	65	65	65	65	65	65	65	65	65	780	180.00	140,400
Project Engineer	TBD													0	146.00	0
Scheduling	Travis Price	8	8	8	8	8	8	8	8	8	8	8	8	96	199.00	19,104
Estimating	Ben Sabati	8	8	8	8	8	8	8	8	8	8	8	8	96	199.00	19,104
Total (Hours)		139	139	139	139	139	139	139	139	139	139	139	139	1,668		329,712
Labor Total (\$)		27,476	27,476	27,476	27,476	27,476	27,476	27,476	27,476	27,476	27,476	27,476	27,476			329,712
Reimbursable Expense (\$)		400	400	400	400	400	400	400	400	400	400	400	400			4,800
Projected Cash Flow		27,876	27,876	27,876	27,876	27,876	27,876	27,876	27,876	27,876	27,876	27,876	27,876		Sub Total	334,512

E 103 A, Rev. 3, 11/2008 Page 1 of 2



Lake County Remodel of the National Guard Armory to Sheriff Administration Facility Project and Construction Management Services Construction and Closeout Phase 1/10/2025

							20	26								Total
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Bill Rates	
Title			Constr	uction			Closeout									1
Project Director	Lance Durfee	8	8	8	8									32	264.00	8,448
Project Manager	Keith Burnham	50	50	50	50									200	225.00	45,000
Construction Manager	Jessica Herron	65	65	65	65	50	50	50						410	191.00	78,310
Project Engineer	TBD													0	155.00	C
Scheduling	Travis Price	8	8	8	8									32	211.00	6,752
Estimating	Ben Sabati	8	8	8	8									32	211.00	6,752
Total (Hours)		139	139	139	139	50	50	50	0	C	0	0	0	706		145,262
Labor Total (\$)		29,153	29,153	29,153	29,153	9,550	9,550	9,550	0	C	0	0	0			145,262
Reimbursable Expense (\$)		400	400	400	400											1,600
Projected Cash Flow		29,553	29,553	29,553	29,553	9,550	9,550	9,550	0	С	0	0	0		Sub Total	146,862

Assumptions:

1) Contracting Time & Materials, Not to Exceed

E 103 A, Rev. 3, 11/2008 Page 2 of 2

481,374

Grand Total



Experience is the difference

Santa Rosa Office 3501 Industrial Drive, Suite A Santa Rosa, CA 95403

707-544-1072

Napa Office

1041 Jefferson St, Suite 4 Napa, CA 94559 707-252-8105

Proposal Number: 95.014360

November 5, 2024

Vanie

Attention: Keith Burnham Keith.burnham@vanir.com

Proposal
Geotechnical Observation and Testing
Special Inspection Services
Lakeport National Guard Armory / Sheriff Administrative Building
1431 Hoyt Avenue
Lakeport, California

As requested, we are pleased to submit this proposal to provide a geotechnical construction observation and testing and special inspection services for the planned remodel of the existing National Guard facility for a Lake County Sheriff Administrative Building to be constructed at 1431 Hoyt Avenue in Lakeport, California. The attached Professional Services Agreement presents our recommended scope of services and corresponding fee estimate.

We appreciate the opportunity to submit this proposal and work with you on this project. When you wish to proceed, please return one signed copy of the attached Professional Services Agreement.

Very truly yours, RGH Consultants

Jared J. Pratt

Principal Engineering Geologist

JJP:EGC:jjp:brw Electronically submitted

https://rghgeo.sharepoint.com/sites/shared/shared documents/work in progress/_pip/_jjp/lakeport armory sherif facility/95.014360 proposal.docx

Attachments: Professional Services Agreement

Schedule of Charges

Grading Observation and Testing Estimate

Special Inspection Estimate



Experience is the difference

November 5, 2024

Santa Rosa Office 3501 Industrial Drive, Suite A Santa Rosa, CA 95403

707-544-1072

Napa Office

1041 Jefferson St, Suite 4 Napa, CA 94559 707-252-8105

Proposal No. 95.014360

PROFESSIONAL SERVICES AGREEMENT FOR GEOTECHNICAL SERVICES

Vanie (CLIENT), requests, and RGH Geotechnical and Environmental Consultants, Inc. (RGH), agrees to provide services as described below.

Project Name: Lakeport National Guard / Sheriff Administrative Building

Project Location: 1431 Hoyt Avenue, Lakeport, California

Project Description: We understand it is proposed to remodel the existing Lakeport National Guard Armory into an administrative building for the Lake County Sheriff.

Scope of Services: The scope of RGH's services during construction will be based on knowledge of the soil conditions gained from the soils report, review of the project plans and specifications, and experience obtained during construction of similar projects. Our typical geotechnical observation and testing includes providing intermittent onsite observation with field and laboratory testing during the following work items:

- Excavation of weak surface soils and old fills within and adjacent to the building and exterior concrete slab areas
- Placement and compaction of fills
- Excavation of footings (on-call checking only)
- Placement and compaction of utility trench backfills (on-call checking only)
- Preparation of subgrade for concrete slabs-on-grade
- Preparation of subgrade and aggregate base for pavement
- Installation of geotechnical drainage improvements

Generally, our special inspection services include observation and testing during the following work items:

- Reinforcing steel placement
- Placement of concrete (including slump and cylinder collection)
- Epoxy installation
- Welding
- Bolt installation
- Shear wall nailing

The results of our observations and testing will be made available to the contractor(s) on the job site so that timely corrective action might be taken, if required. Upon completion, we will summarize the results of our work in a final letter, including field and laboratory data.



Proposal – Geotechnical and Special Inspection Services November 5, 2024

Lakeport Nation Guard Armory Proposal Number: 95.014360

Fee: RGH proposes to perform the services indicated above on a time-and-expense basis in accordance with our then-current schedule of charges. Our current schedule of charges is attached. Our estimated fees are presented below and an itemized breakdown of our estimate is attached. It should be understood that fees for observation and testing during construction are difficult to estimate as they are highly dependent on the contractor's schedule. If a detailed cost estimate is needed for construction observation and testing, we can provide one once a detailed construction schedule has been prepared. We have anticipated that the project falls under California Prevailing Wage law.

Geotechnical Construction Observation and Testing \$44,500– Time and Expense Special Inspection Testing \$91,700 - Time and Expense

This estimate includes our fee for laboratory, clerical, and office engineering support services during construction.

Our total fee could vary depending on the actual construction procedures and rate of progress. These, in turn, are dependent on soil conditions encountered and the prevailing weather. We will keep you advised of our charges by issuing progress billings, and will inform you of any changes in conditions which might significantly affect our fee. The above estimate does not include charges for observation and retesting of the repair of unsatisfactory work.

AUTHORIZATION: The undersigned agrees to the terms and conditions of this Professional Services Agreement. This agreement includes the attached **General Conditions** and **Schedule of Charges**.

Signed	Jared J. Pratt	Signed	
	Principal Engineering Geologist	Printed	
		Date	
	Pir of Class	Client:	
	Eric G. Chase	Address:	
	Principal Geotechnical Engineer		
		Phone:	
		Email:	
How wo	ould you like to receive invoices? \square Mail \square Email		
Please p	provide address for invoices (mail/email)		
Notes/F	Revisions:		

RGH

Experience is the difference

Santa Rosa Office 3501 Industrial Drive, Suite A Santa Rosa, CA 95403 707-544-1072

Napa Office 1041 Jefferson St, Suite 4 Napa, CA 94559 707-252-8105

SCHEDULE OF CHARGES Effective January 1, 2024

Unless agreed otherwise, work is charged for on a time and expense basis in accordance with the following schedule of charges:

PERSONNEL

Principal Associate Senior Engineer/Geologist Project Engineer/Geologist Staff Engineer/Geologist Field Engineer Field Engineer (Prevailing Wage) Graphics	\$205/hour \$195/hour \$175/hour \$150/hour \$140/hour \$180/hour
Graphics	

Slope Inclinometer Instrument	\$200/day
Coring Machine	\$400/day
Infiltration Test Apparatus	
Sonic Echo Foundation Test Gauge	\$200/day
Specialty Software (i.e. SLOPE/W, VoIFlo)	\$70/hour

CONCRETE

Concrete Compression Testing - Set of 4 Cylinder Breaks	\$200
Shotcrete Panel (Includes coring, compression testing of 4 cores, and disposal)	
Each Additional Cylinder Break	
Each Additional Core Break	

OTHER

Travel time is charged at regular rates. Vehicle mileage is charged at the current federal rate. For court appearance, expert witness testimony, or deposition the charge is \$400 per hour for the principal, associate, and project level professional and \$280 per hour for all others, payable in advance. Four and eight hour minimums apply for court appearance.

Time worked in excess of 8 hours per day and Saturday/night work will be charged at 1.5 times the hourly rate. Time worked in excess of 12 hours per day and Sundays/holidays will be charged at 2 times the hourly rate.

Outside services including laboratory analysis, consultants, subcontractors, equipment not listed above, outside reproduction, aerial photographs, meals, lodging, shipping and special equipment or services not listed above are charged at cost plus 20 percent.

	VISITS UNITS	HRS/Visit HRS/UNIT	COST/HR COST/UNIT	Estimated Subtotal	Notes
ERSONNEL Charges are per hour					
Principal	8		\$250.00	\$2,000.00	
Senior Associate			\$0.00	\$0.00	
Associate			\$205.00	\$0.00	
Project Manager			\$0.00	\$0.00	
Senior Engineer			\$195.00	\$0.00	
Senior Geologist			\$195.00	\$0.00	
Project Engineer/Geologist			\$175.00	\$0.00	
Staff Engineer	32	0.50	\$150.00	\$2,400.00	
Field Engineer			\$180.00	\$0.00	
Graphics			\$110.00	\$0.00	
Administrative Assistance	32	0.25	\$90.00	\$720.00	
7 ATTIMIONALIVO 7 COSTOCISCO	UL.	0.20	ψου.σο	\$5,120.00	
QUIPMENT					
Core Machine			\$400.00	\$0.00	
			\$0.00	\$0.00	
				\$0.00	
ASKS	•	0.00	# 400.00	04.000.00	
Subgrade testing	4	6.00	\$180.00	\$4,320.00	
ngineered fill testing	4	6.00	\$180.00	\$4,320.00	
B testing	4	6.00	\$180.00	\$4,320.00	
			\$180.00	\$0.00	
idewalk and hardscape AB testing	3	6.00	\$180.00	\$3,240.00	
ewer trench backfill	3	6.00	\$180.00	\$3,240.00	
ire water trench backfill	2	6.00	\$180.00	\$2,160.00	
			\$180.00	\$0.00	
nterior foundation excavations obs	4	4.00	\$180.00	\$2,880.00	
			\$180.00	\$0.00	
urb AB testing	2	6.00	\$180.00	\$2,160.00	
			\$180.00	\$0.00	
levator addition grading	4	8.00	\$180.00	\$5,760.00	
levator addition foundation excavation	2	4.00	\$180.00	\$1,440.00	
			\$180.00	\$0.00	
			\$180.00	\$0.00	
estimated total visits =	32			\$33,840.00	
ABS Commercial Testing Cet of 4 Cidinden			¢200 22	00.00	
Compression Testing - Set of 4 Cylinders			\$200.00	\$0.00	
1557 Curve	0		\$305.00	\$0.00	
1557 Curve w/rock correction	3		\$490.00	\$1,470.00	
P.I. if needed			\$280.00	\$0.00	
R.I.C.E.			\$170.00	\$0.00	
				\$1,470.00	
SUBTOTAL ESTIMATED COST		100/ 5		\$40,430.00	
TOTAL ESTIMATED COST		10% Co	ontingency	\$4,043.00 if neede \$44,473.00	ed

Services are provided on a time and expense basis in accordance with our Schedule of Charges.

The length and number of our visits are dependent on the contractors' schedule and are not typically within our control.

Confidential Proprietary Page 1

	VISITS UNITS	HRS/Visit HRS/UNIT	COST/HR COST/UNIT	Estimated Subtotal	Notes
TROONING Character have					
RSONNEL Charges are per hour	4		¢250.00	£1,000,00	
Principal	4		\$250.00	\$1,000.00	
Senior Associate			\$0.00	\$0.00	
Associate			\$205.00	\$0.00	
Project Manager			\$0.00	\$0.00	
Senior Engineer			\$195.00	\$0.00	
Senior Geologist			\$195.00	\$0.00	
Project Engineer/Geologist			\$175.00	\$0.00	
Staff Engineer	52	0.50	\$150.00	\$3,900.00	
Field Engineer	02	0.50			
•			\$180.00	\$0.00	
Graphics			\$110.00	\$0.00	
Administrative Support	52	0.25	\$90.00	\$1,170.00 \$6,070.00	
				\$0,070.00	
QUIPMENT Core Machine			\$400.00	\$0.00	
Core iviaci in le			\$0.00	\$0.00	
			ψ0.00	\$0.00	
SKS					
oxy inspections for infills	2	8.00	\$180.00	\$2,880.00	
oxy inspections for foundation connections	1	8.00	\$180.00	\$1,440.00	
oxy inspections for slab connections	2	8.00	\$180.00	\$2,880.00	
oxy inspections for column connections	1	6.00	\$180.00	\$1,080.00	
oxy inspections for ledger connections	2	8.00	\$180.00	\$2,880.00	
,	-	3.00	\$180.00	\$0.00	
avator nit alah ataal	1	4.00			
evator pit slab steel	1	4.00	\$180.00	\$720.00	
evator pit slab concrete	1	6.00	\$180.00	\$1,080.00	
evator pit wall steel	1	4.00	\$180.00	\$720.00	
evator pit wall concrete	1	6.00	\$180.00	\$1,080.00	
			\$180.00	\$0.00	
dition foundation steel	1	4.00	\$180.00	\$720.00	
dition foundation concrete	1	8.00	\$180.00	\$1,440.00	
dition slab steel	1	4.00	\$180.00	\$720.00	
dition slab steel	1	8.00	\$180.00	\$1,440.00	
dition wall steel	1	4.00	\$180.00	\$720.00	
dition wall grout	2	8.00	\$180.00	\$2,880.00	
			\$180.00	\$0.00	
erior imp foundation steel	2	4.00	\$180.00	\$1,440.00	
erior imp foundation concrete	1	8.00	\$180.00	\$1,440.00	
erior imp wall steel	4	4.00	\$180.00	\$2,880.00	
•	4			\$5,760.00	
erior imp wall grout	4	8.00	\$180.00		
	_		\$180.00	\$0.00	
elding Shop	5	8.00	\$218.00	\$8,720.00	
elding Field	10	8.00	\$218.00	\$17,440.00	
			\$180.00	\$0.00	
ash enclosure footing steel	1	4.00	\$180.00	\$720.00	
ash enclosure footing concrete	1	4.00	\$180.00	\$720.00	
ash enclosure slab steel	1	4.00	\$180.00	\$720.00	
ash enclosure siab steel ash enclosure slab concrete					
	1	4.00	\$180.00	\$720.00	
ash enclosure walls steel	1	4.00	\$180.00	\$720.00	
ash enclosure walls grout	1	6.00	\$180.00	\$1,080.00	
			\$180.00	\$0.00	
testing	1	8.00	\$180.00	\$1,440.00	
linder Pick-Up and Delivery	14	4.00	\$140.00	\$7,840.00	
estimated total visits =	52			\$74,320.00	
BS Compression Testing - Set of 4 Cylinders	14		\$200.00	\$2,800.00	
1557 Curve	17		\$305.00	\$0.00	
1557 Curve w/rock correction			\$435.00	\$0.00	
P.I. if needed			\$280.00	\$0.00	
R.I.C.E.	1		\$170.00	\$170.00	
				\$2,970.00	
SUBTOTAL ESTIMATED COST				\$83,360.00	

Services are provided on a time and expense basis in accordance with our Schedule of Charges.

The length and number of our visits are dependent on the contractors' schedule and are not typically within our control.

Confidential Proprietary Page 1





October 16, 2024

Vanir 4540 Duckhorn Drive, Suite 300 Sacramento, CA, 95834 Attn: Lance Durfee

Re: Proposal for Professional Commissioning Services for the Lake County Sheriff Administration Facility

Dear Lance,

3QC is a team of building systems and energy experts that bring a suite of services that are scalable and tailored to meet your project's goals. We can assure you that our team is ready, available and more than capable to be a collaborative part of your team. We are passionate about helping our clients realize the quality facilities they expect - achieving their high-performance goals in operationally functional facilities that will serve their communities well into the future.

Commissioning Expertise: 3QC's business IS Building Commissioning. As building experts, we have developed a specialized team of professionals with backgrounds in design, construction and building operations. Having provided services on over \$29 billion of construction, we understand that every project and client is unique and believe that the success of any project is based on the entire team's ability to work together to meet the client's goals. Unlike any other firm, we have strategically developed our technical resources to provide a focused quality assurance commissioning process in all phases of the project for all of your building systems.

Collaborative Project Partners: We view our services as a "whole project" quality process from design to construction and through operations of the building. We bring experience from each of these phases to the other—communicating the challenges and solutions of each with the goal of helping all project partners succeed together.

All Systems Expertise In-House: We are a full-service commissioning firm with in-house expertise and licensed professionals for all building systems including building enclosure, fire life-safety systems, low-voltage and security systems. You have access to our entire team - designed to address the challenges of each building system in an integrated approach to optimize building performance and a seamless transition to the M&O staff to maintain it into the future.

3QC makes a commitment to 'Make Every Building Better' by communicating, collaborating, and safeguarding project quality to deliver "Enlightened Buildings." Our qualifications and fee are included on the following pages. Should you have any questions, please contact me with any questions at 916-496-8421 or TJenkins@3QCinc.com.

Sincerely,

Tracy Jenkins, MBA, CPSM – Marketing Manager

racy Jenkins





CORPORATE OFFICES

Los Angeles

155 N. Lake Ave., 8th Floor Pasadena, CA 91101 949.681.7084

Sacramento

950 Glenn Drive, Ste 200 Folsom, CA 95630 916.496.8400

San Diego

402 West Broadway, Ste 400 San Diego, CA 92101 619.481.3025

800.655.4148 (Fax) 866.975.7070 (Toll Free) www.3QCinc.com

Certified Small Business

CA DGS#41464

Company Overview | "Enlightened Buildings"

3QC has commissioned over 69 million square feet of facilities worth over \$29 billion in construction. Our processes are based on the industry standards from ASHRAE, NIBS, ACG, and BCA, and have been successfully applied on over 282 LEED and 30 ZNE certified projects involving new construction, tenant improvements, renovations, remodels, modernizations, and multiple project delivery programs. Our active participation in the development and update of LEED is consistent with our proactive approach to commissioning.

Commissioning is an extremely valuable process given the demands of the construction industry and ever-expanding expectations of the finished project. Our focus on "Quality at the Center" of every project throughout the design, construction, and warranty phases has been instrumental in helping our clients reach their project goals. We work side by side with your staff, consultants and contractors – offering an "Open Book" Approach during each phase of the process – to develop and manage the quality requirements.

Our business is built on repeat clients who hire us for multiple projects based on our consistent superior performance. In addition to expertly fulfilling the technical aspects of our commissioning assignments, what we do equally as well is communicate. It is what the "C" in our logo represents. That skill set equates to real delivered value to our clients in the form of properly designed, functional and lasting facilities.

Why 3QC? | Building Commissioning is our Primary Business

3QC's biggest differentiator is that building commissioning is our primary business. Our sole focus is on "Making Every Building Better" through our proven approach and quality technical solutions. We value continuous growth, and our philosophy is to provide our clients with the most experienced, best trained, and most certified commissioning staff in the industry.

Quality Services | "Quality Processes + Team Collaboration = Successful Projects"

While providing high-quality professional commissioning services is our primary business, the table below summarizes the comprehensive professional solutions that we provide our clients.

COMMISSIONING	SUSTAINABILITY
Program Wide Guidelines	LEED Preliminary Analysis
LEED Fundamental Commissioning	Eco-Charrette
LEED Enhanced Commissioning	ZNE Consulting
Total Building Commissioning	OPR Workshops
Retro-Commissioning	Sustainability Master Plans
Monitoring Based Commissioning	Contractor's Green Boot Camp
Building Envelope Commissioning	LEED Certification Plan
Acoustical Commissioning	LEED Administration
Security Systems Commissioning	Sustainability Specifications
Low Voltage Commissioning	Zero by Design Administration
Post Occupancy Evaluation	Fitwell Certification
O&M Training	



Qualified Personnel

Full House - In House: 3QC has a full in-house staff to meet the technical expertise of all rating systems and building systems. Trained and certified to perform commissioning, they understand the "why" and the "value" of collaboration in the design and construction process. You get the benefit of the best-trained (and most certified) staff in the industry. 3QC's approach is focused on assuring quality and functional integrity from the beginning of design to completion of the facility and throughout its operational life cycle.









						Experience	
KEY PERSONNEL	Degree	License	Years Experience	Certified Cx Provider	Title 24	LEED	New Construction
Jim Ogden, LEED Fellow, CxA+BE, WELL AP - Principal in Charge	BS, Environmental Design	-	37			•	
James Becker, PE, CxA+BE, LEED AP, DBIA - Commissioning Authority	BS, Mechanical Engineering	ME FPE	35	•	-	•	•
Chris Taylor, RA, BECxP - Cx Agent / PM	BA, Architecture	RA	42	•	-	•	•
Michael Kalemkaryan, CxA+BE, LEED AP - Cx Agent /PM	MS, Building Science Engineering	_	22	•	•	•	•
Dan Hill, PE, CxA, CEM - Cx Agent	BS, Mechanical Engineer. Technology	ME	22	•	•	•	•
O.Nottingham, PE, CxAP, LEED AP - Sr. Cx Agent / Electrical Distribution	BS, Electrical Engineering	EE	48	•	•	•	•
Mike Mizinski, CEM, PE - Sr. Cx Provider	BS, Mechanical Engineering	ME	38	_	•	•	•
Ron Orchid, QCxP - Sr. Cx Provider / Security/LV	Security Programs	_	47	•	•	•	•
Jeff Lunsmann, CxA+BE, BECxP - Cx Provider / Building Envelope	BS, Construction Management	GC	35	•	•	•	•
Sean McTeer, PE, CxA - Cx Provider	BS, Mechanical Engineering	ME	8	•	•	•	•
Ben Becker, PE - Cx Provider	BS, Mechanical Engineering	ME	13	_	•	•	•
Adrian Torres, QCxP - Cx Provider	BS, Electrical Engineering	_	23	•	•	•	•
Nick Peterson - Cx Field Engineer	BS, Cognitive Science / Neuroscience	_	2	_	•	•	•
Rachel Manoguerra, QCxP, LEED AP - Project Coordinator & LEED	BS, Cultural Anthropology	_	10	•	•	•	•
Julie Welch - Cx Administrator	BS, Mgmt.	_	5	_	-	•	•
Jennifer Christie - Cx Administrator	BS, Mgmt.	_	1	_	•	•	•





EDUCATION
BED Environmental Design,
Texas A&M, 1986

LICENSES & CERTIFICATIONS

LEED Fellow, USGBC

LEED AP BD+C, USGBC

American Institute of Architects, Associate

Qualified Commissioning Provider, University of Wisconsin Madison

Building Enclosure Commissioning Process Provider, University of Wisconsin Madison

Commissioning Authority + Building Enclosure, University of Wisconsin Madison

AFFILIATIONS

State of California Sustainable Building Task Force, Founding Member

USGBC Northern California

California DSA Advisory Board Member

GreenGuard/NSF Emissions Committee

California Energy Efficiency Strategic Plan Committee

CMAA Sustainability Committee

JIM OGDEN, LEED FELLOW, WELL AP, CxA+BE

Principal in Charge

YEARS OF EXPERIENCE: 37 | YEARS WITH FIRM: 16

SUMMARY OF OUALIFICATIONS

Jim Ogden has over 37 years of experience focused on the environmental design, construction and management of facilities for public and private sector clients. He has dedicated his career to building a more sustainable world and received his first LEED AP certification in 2002. In 2011, Jim was distinguished as a LEED Fellow as part of the 34-member inaugural class elected by peers. Over his career, Jim has served on a wide variety of projects where he has been responsible for various stages of LEED certification utilizing LEED NC, LEED CI, LEED CS, LEED EB and LEED S, as well as other benchmark systems including CHPS and LABS 21. He understands how to navigate the inside track on how to best help clients achieve their green building goals through identifying LEED criteria that associates with other benchmarking criteria including Zero Net Energy, WELL Building, and Living Building Challenge. His thorough knowledge of how to integrate these benchmarking systems enables clients to attain compliance with code regulations while also achieving the highest level of certification matched to their goals.

His expertise and outstanding commitment to sharing what he has learned with the community at large is exemplified by his participation in speaking engagements at industry conferences, contributions to publications focused on sustainability, commissioning and resource efficiency, and his service on many green building committees.

- Newark City Civic Center, Administration, Library, & Police HQ Newark, CA
- Contra Costa County Public Safety Bldg & Emergency Ops Ctr Martinez, CA
- LA Metro Metro Ctr Street Emergency Security Ops Ctr Los Angeles, CA
- LADPW Antelope Valley Government Center Lancaster, CA
- San Diego County Sheriff Ridgehaven Admin Hdqtrs. San Diego, CA
- San Diego County Youth Transition Campus Kearny Mesa, CA
- San Diego County Southeastern Live Well Center San Diego, CA
- San Diego County ARCC E County Clerk Branch Office & Archives Santee, CA
- San Diego County East Otay Mesa Fire Station 38 Otay Mesa, CA
- San Diego County Ohio Street Probation Building San Diego, CA
- San Joaquin, County of District Attorney Office T.I. Stockton, CA
- San Joaquin, County of Adult Re-Entry Facility French Camp, CA
- Gold Coast Transit Administrative & Operations Facility Oxnard, CA
- CA DGS CAL Fire South Ops Area HQ Riverside County, CA
- Placer County Mental Health Facility Auburn, CA
- Placer County Vocational Training & Medium Security Facility Auburn, CA
- Placer County Health and Human Services Building North Auburn, CA





EDUCATION

BA Architecture
University of Louisiana,
Lafayette

LICENSES & CERTIFICATIONS

Licensed Architect, California #C25240

Licensed Architect, Montana #3171

Registered Architect (inactive), Louisiana #4157

NCARB Certified #40235

Licensed General Contractor, California B #710434

Building Enclosure Commissioning Provider (BECxP), University of Wisconsin, Madison

AFFILIATIONS

American Institute of Architects #30070955

CHRIS TAYLOR, RA, AIA, NCARB, BECXP

Commissioning Agent / Project Manager

YEARS OF EXPERIENCE: 42 | YEARS WITH FIRM: 11

SUMMARY OF QUALIFICATIONS

Chris Taylor is a Licensed Architect with over 40 years of experience in the design and construction industry. As both a Licensed, NCARB certified Architect and General Contractor, Chris' skill set is unique. He has a full background in design, as well as a successful career managing the construction phase of projects from the ground up. As the industry moves towards a more sustainable "whole building" design and construction process, Chris is certified as a Building Enclosure Commissioning Provider and now applies his background to improve building enclosure and architectural system effectiveness and efficiency. Chris has the "know how" to translate this from design to construction with the ultimate goal of delivering projects that save energy and money, and are fully functioning as designed to serve the client for years to come.

Chris develops the commissioning plan and manages our team of building experts to most effectively commission your facilities, optimize your systems performance and ensure that your facilities function at completion and monitor performance requirements after completion. He specializes in performing 'deep-dive' design reviews of building architectural and enclosure systems during the design phase looking for continuity of systems, compatibility of materials, and ease of maintenance to catch issues when changes are most cost efficient. Chris reviews applicable submittals and shop drawings, leads field mock-up testing, and witnesses installation activities in preparation for the functional testing phase. He documents results of tests and assists during the warranty review phase by interviewing staff and walking the project to identify and document all warranty related issues.

- Contra Costa County Public Safety Bldg & Emergency Ops Ctr Martinez, CA
- Newark Civic Center / Library, Administration, & Police HQ Newark, CA
- Placer County Health and Human Services Building North Auburn, CA
- Placer County Mental Health Facility Auburn, CA
- Placer County Vocational Training & Medium Security Facility Auburn, CA
- Kings County Juvenile Center Remodel & Expansion Hanford, CA
- Kings County Kings County Jail Expansion Hanford, CA
- Merced County Mental Health Improvement Center Merced, CA
- Placer County Health and Human Services Building North Auburn, CA
- Placer County Mental Health Facility Auburn, CA
- Placer County Vocational Training & Medium Security Facility Auburn, CA
- Tulare County Seguoia Field Program Facility Visalia, CA
- Tulare County South County Detention Facility Porterville, CA
- Tuolumne County New Jail Facility Sonora, CA





EDUCATION

Coursework in Architectural Design, City College of San Francisco

CERTIFICATIONS

Qualified Commissioning Provider (QCxP), University of Wisconsin, Madison

AFFILIATIONS

ASIS International, San Francisco and Sacramento Chapters

SF Bay Area Chairman of Annual Seminar and Exhibit for 5 years

Recipient of Chairman of the Year Award Affiliation

RON ORCHID, QCxP

Senior Commissioning Provider - Security and Low Voltage

YEARS OF EXPERIENCE: 47 | YEARS WITH FIRM: 11

SUMMARY OF QUALIFICATIONS

Ron Orchid is a Qualified Commissioning Provider with 47 years of experience in security and low voltage system program and project management. Having served as Owner's Representative on a variety of design/build projects for some of the country's leading high-tech companies, Ron has managed and supervised large project teams including designers, engineers, schedulers, installation subcontractors and field technicians. He has successful experience working with multiple user groups and stakeholders, managing project processes to meet project goals. Ron's industry expertise and knowledge of leading manufacturers, years of project management of security systems installation, and understanding of field technicians and system's integrators is highly valuable to the commissioning process when coordinating the interdependencies of low voltage systems to the overall building systems.

Ron has the skill necessary to take the job from design through occupancy supporting the owner's needs to have fully functioning security, communication and safety systems. Ron's responsibilities include review of all low voltage systems and security interdependencies, low voltage and security systems commissioning plan development, pre-functional checklists, coordinating contractor's installation, performance verification and systems training supervision. He assists with project deliverables and construction phase activities as needed.

- Contra Costa County Buchanan Field Airport Concord, CA
- San Joaquin, County of Adult Re-Entry Facility French Camp, CA
- San Joaquin, County of District Attorney Office T.I. Stockton, CA
- Contra Costa County Public Safety Bldg & Emergency Ops Ctr Martinez, CA
- Contra Costa County W County Re-Entry, Treatment & Housing Richmond, CA
- Kings County Juvenile Center Remodel and Expansion Hanford, CA
- Kings County Kings County Jail Expansion Hanford, CA
- Merced County of / Mental Health Improvement Center Merced, CA
- Mountain House Community Services Bldgs / Security Assessments & Cx
- Mountain House Town Hall and Library Mountain House, CA
- Napa County Staff Secure Facility Napa, CA
- Tulare County Sequoia Field Program Facility Visalia, CA
- Tulare County South County Detention Facility Porterville, CA
- Anaheim Convention Center Expansion Anaheim, CA
- Yolo County Leinberger Center Replacement Woodland, CA
- Yuba County Medical & Mental Health Rehab Facility Marysville, CA
- Yuba County Tri County Juvenile Center Marysville, CA



EDUCATION

BS Construction

Management, Cal Poly
San Luis Obispo

LICENSES & CERTIFICATIONS

Commissioning Authority + Building Enclosure (CxA+BE), University of Wisconsin, Madison

Building Enclosure Commissioning Provider (BECxP), University of Wisconsin, Madison

Class B General Contractor #81827

Re Estate License Cal BRE#02934459

JEFF LUNSMANN, CxA+BE, BECxP

Commissioning Provider

YEARS OF EXPERIENCE: 35 | YEARS WITH FIRM: 6

SUMMARY OF QUALIFICATIONS

Jeff Lunsmann has over 35 years of experience in project/construction management, facilities management and real estate development. He is a BBB A+ rated general contractor with a strong background in tenant improvements. Jeff has coordinated full teams and managed real estate portfolios including maintenance and operations of a combined total properties of over 900,000 SF. With this background, Jeff is highly experienced in interfacing with regulatory agencies, building code inspectors, fire marshal and other AHJs. His strong communication skills and ability to manage from concept to occupancy is highly applicable to the commissioning process to deliver an energy efficient, fully functioning facility to the owner by encouraging a collaborative environment for the success of the whole team.

Jeff is a certified Building Enclosure Commissioning Process Provider as well as a Building Enclosure Commissioning Authority. He supports our building envelope team with on-site construction phase support including assisting in reviewing submittals and shop drawings, witnessing field mock-up testing, and installation activities. He documents results of tests and assists in developing project reports and deliverables. Jeff also supports our commissioning team with on-site construction phase support as well as managing the deliverable process including functional test plan development and troubleshooting. Having worked in maintenance and operations of numerous properties, Jeff also brings an excellent level of understanding to training the M&O staff.

- Contra Costa County Public Safety Bldg & Emergency Ops Ctr Martinez, CA
- Contra Costa County W County Re-Entry, Treatment & Housing Richmond, CA
- Merced County Mental Health Improvement Ctr Merced, CA
- Placer County Vocational Training & Medium Security Facility Auburn, CA
- Mountain House Town Hall & Library Mountain House, CA
- Gold Coast Transit Administrative & Operations Facility Oxnard, CA
- San Diego County ARCC E County Clerk Branch Office & Archives Santee, CA
- San Diego County Pine Valley Fire Station Pine Valley, CA
- San Diego County North Coastal HHSA Facility Oceanside, CA
- Sacramento City Fire Station 15 Sacramento, CA
- Placer County Health and Human Services Building North Auburn, CA
- Placer County Mental Health Facility Auburn, CA
- Yolo County Leinberger Center Replacement Woodland, CA
- Santa Clara County Vietnamese American Service Ctr San Jose, CA
- Yuba County Tri County Juvenile Center Marysville, CA
- Yuba County Medical & Mental Health Rehab Facility Marysville, CA
- Tuolumne County New Jail Facility Sonora, CA





EDUCATION

BS Mechanical Engineering, California State University, Sacramento

CERTIFICATIONS

Professional Mechanical Engineer, CA #M41355

Certified Commissioning Authority (CxA), #524-2216, ACG

Commissioning Provider Certificate, BCxA

AFFILIATIONS

Building Commissioning Association (BCxA)

SEAN MCTEER, PE, CxA

Commissioning Provider

YEARS OF EXPERIENCE: 8 | YEARS WITH FIRM: 8

SUMMARY OF QUALIFICATIONS

Sean McTeer, PE is a Licensed Mechanical Engineer and Certified Commissioning Authority with 8 years of experience in the industry, who supports both the design and construction phases of projects. He develops equipment lists, commissioning plan, functional test plans and design reviews. Sean has significant experience working with contractors in the field including pre-functional testing, equipment start-up and functional testing. During construction, Sean also leads on-site activities, coordination meetings, job-site walks, systems installation inspection, reviewing and verifying quality checklists, submittal review, pre-functional and functional testing, equipment start-up and observation, and seasonal testing.

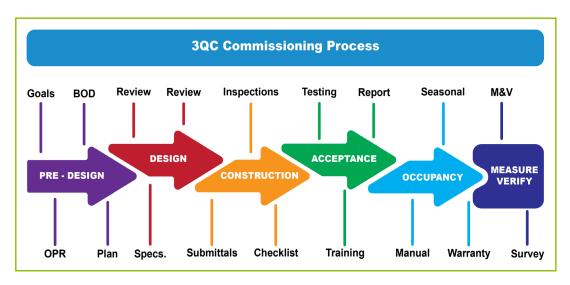
Sean assists project management teams during construction in solving MEP coordination and control systems issues. He also coordinates the commissioning phase activities documenting contractor progress and quality assurance efforts. He records results of tests and helps produce deliverables that aid maintenance staff with any operation and maintenance needs including the Final Commissioning Report and Systems Manual. He has assisted 3QC's commissioning team on projects for both public and private sector clients ranging from 10,000 SF to over 3,000,000 SF. He has supported commissioning activities for K-12 schools, community colleges, public safety buildings, stadiums and large mixed-use developments. In addition to being a strong but fair field presence, Sean will ensure quality standards are followed from the initial mock-up or sample through to the completion of the job.

- Contra Costa County Public Safety Bldg & Emergency Ops Ctr Martinez, CA
- Tulare County Seguoia Field Program Facility Visalia, CA
- Tulare County South County Detention Facility Porterville, CA
- Los Angeles County DPW Antelope Valley Government Center Lancaster, CA
- Mountain House Town Hall and Library Mountain House, CA
- Napa County Staff Secure Facility Napa, CA
- Sacramento City Fire Station 15 Sacramento, CA
- San Diego County Youth Transition Campus Kearny Mesa, CA
- San Diego County ARCC E. County Clerk Branch Office & Archives Santee, CA
- San Diego County North Coastal HHSA Facility Oceanside, CA
- San Diego County Ohio Street Probation Building San Diego, CA
- San Diego County Pine Valley Fire Station Pine Valley, CA
- San Diego County East Otay Mesa Fire Station 38 Otay Mesa, CA
- CA DGS CHP Replacement Facility San Diego, CA
- CA DGS CAL Fire South Ops Area HQ Riverside County, CA



3QC's Approach to Commissioning

As your Commissioning Agent (CxA), it is our responsibility to work in collaboration with your team to build a quality, high-performing environment ready for tenants to continue with your sustainable vision for the property. Our commissioning process is an organized, systematic approach based on ASHRAE, BCxA and ACG best practices and our own project management background. It not only adds credits to LEED but also delivers continuous improvement throughout the life of the project and ensures that you receive a completed facility that functions according to your original intent and high-performance criteria and standards. We will develop a commissioning plan that outlines the quality expectations for each team member with updates during each phase of the project to help them succeed.



Our commissioning quality process will proceed with the following general key strategies tailored to the specific needs and requirements:

Owner's Project Requirements Review	Seasonal and Warranty Testing			
BOD/Design Intent Review	Measurement and Verification Programs			
Design Review	Building/Energy Assessments			
Cx Plan Development/Implementation	Building Envelope Commissioning			
Cx Specifications	Thermographic Study			
Submittal Review	Thermal Comfort Verification			
Pre-functional Testing/Quality Checklists	Sustainable Education Training			
Systems Balancing Check	Low Voltage/Security Systems			
Functional Testing and Site Reports	Owner Systems Training			
Master Deficiency Log	Systems Manual/Tenant Guidelines			
O&M Review and Documentation	Final Commissioning Report			

Delivering competent, responsive Cx services seamlessly within the construction schedule/budget, providing complete progress and close-out documentation, and doing so in a cooperative and collaborative manner is what we're good at. The true value we bring is dollar savings and facilities that perform as designed. In our experience, we have found that the commissioning services we provide pay for themselves many times over during the course of the project. We achieve this through an approach based on collaboration, strong project management skills and the technical know how to get the job done and help the entire team succeed.





EMERGENCY OPERATIONS CENTER & PUBLIC SAFETY BUILDING — MARTINEZ, CA

OWNER

Contra Costa County

COMPLETION DATE

2020 - LEED Enhanced & BECx

2024 - Retro-Cx

PROJECT COST

\$110 Million

PROJECT SIZE

38,000 SF (EOC/PSB)

82,000 SF (County Admin Bldg + Parking)

CERTIFICATION

LEED Gold Certified

3QC SERVICES INCLUDED:

- LEED Fundamental Commissioning
- LEED Enhanced Commissioning
- Building Enclosure Commissioning
- Retro-Commissioning

3QC performed
Building Enclosure
Commissioning to verify
the integrity of the
buildings and to meet
LEED requirements.



3QC performed LEED Fundamental and LEED Enhanced Commissioning for the two new facilities for Contra Costa County. The first facility is a new Emergency Operations Center (EOC) and Public Safety Building (PSB). The Sheriff's administrative offices and centralize field operations with administration and emergency services division will be relocated to this new facility. The new 38,000 SF facility will be an assembly of three components that will house Sheriff training and awards programs, the **Sheriff's Administration building**, and Emergency Operations. This EOC/PSB is an essential services structure and seismically separated from the abutting Sheriff's Administration building.

3QC assisted Vanir, the Construction Manager, with commissioning services to help meet LEED goals and assist the County in achieving a fully functional facility that achieves their energy and occupant goals. Our team provided LEED Enhanced Commissioning and verification of the both the typical MEP, HVAC and control systems, as well as the Critical Infrastructure systems. We commissioned the emergency power, security and communications systems to verify building operation during a potential emergency event. In addition, our team provided Building Enclosure Commissioning in support of this LEED certification goal. This process not only identified weaknesses in the installed enclosure systems but also created a more energy efficient and healthy building environment.

3QC provided significant value to the owner through technical leadership and collaboration with the Design-Build team. Helping to balance the Owner's Project Requirements with the contractor's value engineering process, 3QC assisted by proposing engineering and systems control strategies to balance the projects' competing priorities. This included a significant collaborative effort with final development of control strategies for a two-pipe heating/cooling infrastructure, providing a cost-effective, energy-efficient and maintainable system. This project achieved LEED Gold certification.

Our team was hired back to provide retro-commissioning to recertify the heat pumps at the CCC EOC facility. 3QC is overseeing the commissioning process to ensure that the commissioned systems are fully functional and perform in accordance with the design and operational requirements.





NEWARK CITY, CIVIC CENTER -ADMINISTRATION, LIBRARY, & POLICE HEADQUARTERS — NEWARK, CA

OWNER

City of Newark

COMPLETION DATE

202

CONSTRUCTION COST

\$88.5 Million

PROJECT SIZE

74,205 SF

CERTIFICATION

LEED Silver

3QC SERVICES INCLUDED:

- LEED Fundamental Commissioning
- Title 24 Commissioning

3QC was proactive in providing assistance with troubleshooting and actively providing input for possible solutions and components to investigate and expediate the resolution process.



3QC provided Title 24 and LEED Fundamental Commissioning for the new Newark Civic Center. The new complex includes a new 25,000 SF **administration building**, 24,000 SF library, and new 17,000SF **police headquarters**. The design build project was built by Webcor and designed by Perkins & Wills Architects. Funded through a ballot measure passed in November 2016, the City's vision for the new facility was to create a centralized location to provide community services as well as a gathering place that creates a sense of community and pride for the city's citizens.

3QC in conjunction with Webcor were able to provide well scheduled and well executed commissioning activities. During 3QC's site visit to verify the installed equipment, major equipment changes had already been noted. Prior preparation for these changes allowed 3QC to be better prepared for onsite testing commissioning activities, anticipating potential issues and allowing for quick and efficient resolution of issues as they arose during the commissioning process.

During weekly OAC meetings, 3QC provided answers to commissioning related questions from the involved trades and ensured that the project team had a comprehensive understanding of what was required for commissioning to be successful. 3QC's onsite efforts assisted in discovering and correcting several major issues with assorted mechanical equipment. 3QC was proactive in providing assistance with troubleshooting and actively providing input for possible solutions and components to investigate and expediate the resolution process.





NAPA COUNTY, RE-ENTRY STAFF SECURE FACILITY — NAPA, CA

OWNER

Napa County

COMPLETION DATE

2020

PROJECT COST

\$16 Million

PROJECT SIZE

63,000 SF

3QC SERVICES INCLUDED:

Commissioning Oversight

3QC provided
Commissioning
Oversight and
consultation to the
project to ensure quality
standards were met.



The new Napa Staff Secure Facility provides housing, program and administrative space for inmates transitioning out of the Napa County Corrections system and will be the first multi-facility housing of the County's inmates. The staff-secure facility offers cognitive behavior programs and skill development training and provides an opportunity for individuals to go into the community in a controlled way helping them learn how to be productive members of their community, with the goal of reducing their chances of re-offending. The facility is made of four dormitory housing units and one administration-support building and includes 72 beds, day rooms, a red yard, a kitchen, and dining space.

3QC performed a site verification inspection to confirm functional integrity of the building systems as reported by the contractor. Several of the building systems did not function as required by the contract. 3QC provided a detailed list of systems status and current issues. Completion of the commissioning requirements for the Napa Staff Secure Facility were contractually identified as the construction contractor's responsibility, under Axiom Engineers.

3QC was retained by Vanir Construction Management to provide Commissioning Oversight and consultation to the project. Commissioning requirements were incorporated into the construction documents by including a commissioning specification section that described in detail the commissioning process, including the commissioning team, communications protocols, contractor requirements and testing requirements. Quality checklists were provided to the contractor to ensure that the quality standard was clearly defined. These documents included project specific details including building systems that were tested, team communications and meetings, pre-functional checklists, and functional testing sequences. During the construction phase, 3QC continually monitored the processes of installation and performance of the systems. Prior to building start-ups, our team prepared functional testing plans to be used by Axiom to operate the commissioned systems through their range of operating modes.





CONTRA COSTA, COUNTY ADMINISTRATION BUILDING REDEVELOPMENT – MARTINEZ, CA

OWNER

Contra Costa County

COMPLETION DATE

N/A

PROJECT COST

\$50 Million

PROJECT SIZE

55,000 SF

GREEN CERTIFICATION

LEED Gold

3QC SERVICES INCLUDED:

 LEED Enhanced Commissioning

3QC is assisting the CM with commissioning services to help meet LEED goals and assist the owner in achieving a fully functional facility that achieves their energy and occupant goals.



Contra Costa County is redeveloping their **County Administration Building**, located in Martinez, California. This project includes demolition and redevelopment at 651 Pine Street, and full or partial demolition and redevelopment of the 1944 annex to the Old Jail property at 650 Pine Street. The proposed new structures will comply with the 2019 California Building Code, Title 15 and Title 24 requirements and Contra Costa County Building Design and Construction Guidelines.

The project at 651 Pine Street will include the abatement and demolition of a the vacated 122,000 SF Administration building that includes a 12-story tower and attached 5-story north annex and the construction of a new 55,000 SF, 2-story County office building over 1-story of parking. Additionally, the project includes the abatement and partial demolition of the 30,000SF, abandoned 1944 annex to the old Jail and redevelopment of a new public plaza that is Bay-Friendly rated. This project has a goal of LEED Gold certification.

3QC is assisting Vanir, the Construction Manager, with commissioning services to help meet LEED goals and assist the owner in achieving a fully functional facility that achieves their energy and occupant goals.





SAN JOAQUIN COUNTY, PUBLIC HEALTH SERVICES BUILDING — STOCKTON, CA

OWNER

County of San Joaquin

COMPLETION DATE

2024

PROJECT COST

\$33 Million

PROJECT SIZE

30,475 SF

3OC SERVICES INCLUDED:

- Title 24 Commissioning
- OPR Development

3QC assisted the County in developing their OPR for the project and will perform building commissioning services during design and construction.



3QC was hired by the County to provide Title 24 Commissioning services for the new construction of the San Joaquin Public Health Services Building. Due to increased maintenance issues, a growing population and increased need for preventative care, health and wellness programs, the County has constructed a new state of the art facility that now meets the needs of the County and will continue to well into the future. The new Public Health Services Building consolidates Public Health Services and the County's Health Care Services Agency. The first phase of the project was a new 36,000 SF facility with modernized health clinic spaces and a biosafety lab (BSL-2) for testing tuberculosis, encephalitis, yellow fever and West Nile viruses. The original facility remained open during construction.

3QC assisted the County in developing their owner project requirements (OPR) for the project and performed building commissioning services during design and construction for compliance with Title 24. The County's goals for the project included strategies to maximize quality and minimize the project's carbon footprint in alignment with the County's Green Purchasing Policy along with the expectation to exceed code energy goals.

During construction, commissioning focused on the installation and performance of the following systems: Air Conditioning Units, Split Systems, Exhaust Systems, Building Automation System, Domestic Hot & Cold Water System, Lighting & Lighting Control Systems, and Irrigation Control System. A key result of this project's completed commissioning process was our involvement during scheduling and coordination of the equipment start-up, control system testing, and TAB work. In addition, building maintenance and operation's staff were trained on the systems and can now efficiently respond to issues as they arise. The commissioning process has identified several issues that have been resolved through close collaboration with the Cx team.





SHERIFF'S RIDGEHAVEN ADMIN HEADQUARTERS — SAN DIEGO, CA

OWNER

San Diego County

COMPLETION DATE

2017

PROJECT COST

N/A

PROJECT SIZE

75,000 SF

3QC SERVICES INCLUDED:

Re-Commissioning

3QC's re-commissioning (RCx) processes focus on delivering quality, comfortable, energy efficient projects and support documentation necessary for the building owner to operate the systems in the most cost effective manner possible and provides recommendations for thermal comfort solutions and corrective measures.



San Diego County hired 3QC to Re-Commission the **Sheriff's Headquarters building**. Re-commissioning is a systematic process that identifies the current operational status of the building systems as well as identifies issues that plague building operators and then develops solutions to these issues. Properly performed, recommissioning provides a road map to correct building operational problems and improve occupant's thermal comfort.

3QC's recommissioning (RCx) processes focus on delivering quality, comfortable, energy efficient projects and support documentation necessary for the building owner to operate the systems in the most cost effective manner possible and provides recommendations for thermal comfort solutions and corrective measures. We use a systematic approach to ensure that we thoroughly investigate each critical component and provide the building operator with a detailed analysis and recommended solution. This retro focused on correcting thermal comfort issues rather than focusing on energy efficiency.

The primary objective for the 75,000SF Sheriff's Admin Headquarters was to evaluate the existing floor plan configurations and zoning, building management systems, document their operational condition, and make recommendations for repair and to improve the function of the building systems. When the repairs are completed, we will perform commissioning services for the new HVAC systems that will replace the current, older equipment. Testing was challenged with the 24-7-365 operation of the Headquarters facility for both our team and our TAB team. We did however complete required testing and recommended quite a few site repairs. One of the main challenges we found was the floor plans – they had been modified to meet the space needs of the facility without modifying the HVAC systems to meet those new requirements..

SCOPE OF SERVICES



Commissioning Tasks and Fees

3QC, as Commissioning Authority (CxA), will perform all the tasks required to meet California Building Code (T24) requirements. We will oversee the commissioning process to ensure that the project is fully functional and performs in accordance with the owner's project requirements and intent at completion of the project. 3QC will also ensure that documentation for certification as it relates to commissioning is complete.

For this project, we will perform the following services:

TITLE 24 COMMISSIONING

Systems to be commissioned:

- 1. HVAC Systems and BMS Controls
- 2. Interior and Exterior Lighting and Lighting Controls
- 3. Heating Hot Water Systems
- 4. Irrigation Controls
- 5. Renewable Energy Systems
- 6. Security Systems

Design / Pre-Construction Phase

The CxA completes the following Commissioning Process activities during the Design Phase:

- 1. Reviews the Owners Project Requirements (OPR). If one does not exist, provide criteria for completing the OPR.
- 2. Verifies the Basis of Design (BOD) with regard to the OPR.
- 3. Leads the Title 24 require Design Review Kick-Off Meeting (Part 6, Section 120.8(d)) and complete NRCC-CXR-01-E form.
- 4. Develops a Commissioning Plan encompassing the design, construction, occupancy, and operations phases. The Commissioning Plan shall include at a minimum the following items:
 - a. Commissioning program overview
 - b. Identify Commissioning Team members
 - c. Detailed description of the commissioning process activities
 - d. Roles and responsibilities
 - e. Communication structures
 - f. Commissioned systems and equipment
 - g. List of expected work products / deliverables
 - h. Commissioning process schedule and milestones
- 5. Determines the commissioning requirements and activities to include in the construction documents, with review by the Project Team, for integration into the project's construction specifications.
- 6. Develops a Systems Manual outline and format.
- 7. Develops and incorporates the commissioning requirements into the construction documents. The minimum commissioning requirements for the construction documents to be included are:
 - a. Commissioning team's roles and responsibilities,
 - b. Contractors' and Installing Contractor' responsibilities,
 - c. Submittal review procedures for commissioned systems,
 - d. Meeting schedule,
 - e. Construction verification procedures,



- f. Startup plan development and implementation,
- g. Functional performance testing,
- h. Acceptance and closeout,
- i. Owner / operator training requirements,
- j. Warranty review site visit 10 months after occupancy.
- 8. Performs independent design review at 90% Construction Documents.

Construction Phase

The CxA accomplishes the following commissioning process activities during the construction phase:

- 1. Organizes the commissioning process components and conduct a Kick-Off meeting where the commissioning process requirements are reviewed with the commissioning team.
- 2. Organizes and conducts periodic commissioning team meetings necessary to plan, develop the scope of, coordinate, and schedule activities and resolve problems.
- 3. Reviews submittals concurrent with the design team review.
- 4. Works with Contractor in completing construction checklists and tracking of checklist completion.
- 5. Statistically samples completion of construction checklists on a periodic basis to verify that the Contractor's quality process is achieving the OPR.
- 6. Develops specific functional testing procedures for the Contractor to review and apply during the commissioning process.
- 7. Witnesses the execution of the tests by the Contractor or Installing Contractor.
- 8. Documents the results of the tests.
- 9. Documents the correction and retesting of noncompliance item with the use a Master Issues Log.
- 10. Reviews, pre-approves, and verifies the training provided by the Contractor.
- 11. Completes and delivers the Systems Manual.
- 12. Provide final commissioning report.
- 13. The CxA shall report results, findings, and recommendations directly to the Project Manager or designee. The final commissioning report shall include the minimum information:
 - a. Executive summary of the process and the results of the commissioning program, including observations, conclusions, recommendations, and any outstanding items
 - b. History of any system deficiencies identified and how they were resolved, including any outstanding issues or seasonal testing scheduled for a later date,
 - c. Project commissioning specifications,
 - d. Verification of installation by validation of the construction checklist,
 - e. Pre-functional Checklists and Functional Test Plan (FTP) results and forms,
 - f. Description of commissioning process benefits,
 - g. Systems performance test results and evaluation,
 - h. Confirmation of individual systems meeting the Projects requirements, basis of design, and contract documents.



Commissioning Fees

3QC has developed a business model and methodology that allows us to offer high quality commissioning services at competitive prices. We have thoroughly reviewed your scope of work and feel our experience and our qualified staff offers the best price without sacrificing the highest quality services for this unique facility. 3QC's fees are inclusive of travel and we do not anticipate any reimbursable expenses.

LAKE COUNTY, SHERIFF ADMIN FACILITY

Professional Services	Fees
Title 24 Commissioning	\$39,399

Assumptions

- 1. An electronic copy of all project construction documents will be provided to 3QC.
- 2. Design team will respond to commissioning review comments with final resolution acceptance by the client.
- 3. Construction and commissioning will be completed in one (1) phase.
- 4. A total of six (6) days on-site or on-site meetings are included.
- 5. For additional on-site meetings or inspection trips, the Owner shall compensate 3QC for such additional services and expenses at the rate of \$250.00 per labor hour, plus travel and per diem allowances for meals and lodging according to current U.S. General Services Administration (GSA) Per Diem Rates.
- 6. Additional testing days are assumed as fourteen (14) hours of effort.
- 7. This is a Lump Sum proposal.
- 8. This in an all-inclusive fee. There are no reimbursable costs required.

enlightened buildings

950 Glenn Drive, Suite 200 | Folsom, CA 95630 916.496.8400 | 866.975.7070 | www.3QCinc.com