#### **RESOLUTION NO. 2017-022**

#### A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ROHNERT PARK APPROVING A BUDGET AMENDMENT FOR THE WESTSIDE PUBLIC SAFETY STATION PROJECT (CITY PROJECT 04-13) AND RELATED ACTIONS

**WHEREAS**, the City's General Plan outlined the need for a public safety facility west of Highway 101 to serve planned growth in the City; and

WHEREAS, the 2013 Environmental Impact Statement for the Graton Casino concluded that funding fire and emergency-service related capital improvements in Rohnert Park was a way to mitigate impacts to public safety needs associated with the Casino; and

WHEREAS, the First Amended and Restated Memorandum of Understanding (MOU) between the Federated Indians of Graton Rancheria ("Tribe") and the City of Rohnert Park ("City"), which was executed in April of 2013, required the Tribe to provide \$3,750,000 for the development and construction of a new fire station west of Highway 101 and also a separate amount to fund acquisition of a ladder truck that will be deployed from the fire station; and

WHEREAS, the required contributions from the Tribe for the fire station west of Highway 101 and the ladder truck have been received; and

WHEREAS, the City's Public Facilities Finance Plan, most recently updated in 2011, includes an additional \$3,722,000 in programmed funding for the Westside Public Safety Station; and

WHEREAS, the Westside Fire Station Project was reviewed in both the Environmental Impact Report for the Stadium Area Master Plan (2008) and the Mitigated Negative Declaration for the Residences at Five Creek/City Public Safety and Public Works Facility (2017); and

WHEREAS, the Development Agreement between the City and the developer of the Residences at Five Creek project, which was executed in January of 2017, requires the City to fund construction of a portion of Martin Avenue along the frontage of the proposed west side public safety station; and

WHEREAS, interim, modifications to the City's Fire Station #2 are necessary allow the City to receive the ladder truck in a timely fashion; and

WHEREAS, incorporating the Martin Avenue Project and the Fire Station #2 modifications into Westside Public Safety Station Project is financially and practically beneficial to the City but requires construction work to begin earlier than was anticipated; and

WHEREAS, LCA architects was selected through a competitive, qualifications-based process to provide design services for the Westside Public Safety Station pursuant to Section 3.6.6 of the City's Purchasing Policy, the City has secured a proposal from LCA Architects in the amount of \$478,075; and

WHEREAS, the cost for these design services together with anticipated early construction activity exceeds the budget adopted in the City's Fiscal Year 2016-17 Capital Improvement Program.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Rohnert Park as follows:

- The Finance Director is authorized and directed to process a budget amendment of three million one hundred thirty two thousand six hundred sixty-two dollars (\$3,132,662) for the Westside Public Safety Station with funding from the Public Safety Building Contribution Fund (Fund 178).
- 2. The City Manager is hereby authorized to execute Task Order 2017-01 with LCA Architects in the amount of four hundred seventy eight thousand seventy-five dollars (\$478,075) for design of the Westside Public Safety Station.

**DULY AND REGULARLY ADOPTED** this 14<sup>th</sup> day of February, 2017.

#### CITY OF ROHNERT PARK

Jake Mackenzie, Mayor

ATTEST:

Caitlin Saldanha, Deputy City Clerk

Attachment: Exhibit A

AHANOTU: Are BELFORTE: Are CALLINAN: Absent STAFFORD: Are MACKENZIE: Are Aye AYES: (4) NOES: (0) ABSENT: (1) ABSTAIN: (0)

#### LCA ARCHITECTS TASK ORDER NO. 2017-01

#### CITY OF ROHNERT PARK AND LCA ARCHITECTS

#### AUTHORIZATION TO COMPLETE FINAL DESIGN FOR THE WEST SIDE PUBLIC SAFETY STATION

#### **SECTION 1 – PURPOSE**

The purpose of this Task Order is to authorize and direct **LCA Architects** to proceed with the work specified in Section 2 below in accordance with the provisions of the MASTER AGREEMENT between the City of Rohnert Park ("City") and **LCA Architects** ("Consultant") hereto dated June 14, 2016

#### **SECTION 2 – SCOPE OF WORK**

The items authorized by this Task Order are presented in Attachment "A" - Proposed Work Plan.

#### SECTION 3 - COMPENSATION AND PAYMENT

Compensation shall be as provided in the MASTER AGREEMENT between the parties hereto referenced in SECTION 1 above. The total cost for services as set forth in SECTION 2 shall be actual costs (time and materials) based on Consultants' standard labor charges in accordance with the provisions of the MASTER AGREEMENT and as shown in Attachment "B" for an amount not-to-exceed \$478,075.

#### **SECTION 4 – TIME OF PERFORMANCE**

The work described in SECTION 2 shall be completed by **December 22, 2017** or as extended by the City Engineer.

#### **SECTION 5 – ITEMS AND CONDITIONS**

All items and conditions contained in the MASTER AGREEMENT for professional services between City and Consultant are incorporated by reference.

Approved this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

#### CITY OF ROHNERT PARK

#### LCA ARCHITECTS

Darrin Jenkins, City Manager (Date) Per Resolution No. 2017-\_\_\_\_ adopted by the Rohnert Park City Council at its meeting of \_\_\_\_\_, 2017. Carl Campos

(Date)

ATTEST:

City Clerk

Attachment A





LCA Architects | LCA 17004

January 11, 2017

Vanessa Marin, City Project Manager City of Rohnert Park 130 Avram Avenue Rohnert Park, CA 94928 (707) 588-2251 direct vmarin@rpcity.org www.ci.rohnert-park.ca.us

## RE: Fire Station No.3

LCA Project #17004

David,

#### 1. Introduction

Thank you for the opportunity to submit a fee proposal for professional design services (see Exhibit 1 and Exhibit 2).

We have enjoyed working with you and the Public Safety Division of the City of Rohnert Park during Fall 2016 to develop a conceptual layout for the fire station building and site located at the corner of Labath Avenue and Martin Avenue (see **Exhibit 4**). This documentation will serve as the basis of the work for Fire Station No. 3.

The construction cost budget is set at \$3.75 million for the new fire station.

#### 2. Scope of Work

Provide design services for the new Fire Station 3.

#### LCA ARCHITECTS

590 Ygnacio Valley Road Suite 310 Walnut Creek, CA 94596 **T** 925.944.1626

1970 Broadway Suite 800 Oakland, CA 94612 **T** 510.272.1060

#### 3. Project Schedule

Please see the conceptual project schedule (see **Exhibit 5**).

This schedule was originally provided to the City on 12/13/16, and it should be noted that the schedule is on the aggressive side. The Design Team Selection Process may take longer. Agency approvals may take longer. Bidding & Contract Award may take longer. There is potential for things to push out a few months. If everything can proceed as listed per this conceptual schedule, then construction would commence in November 2017.

It is our understanding that the City would like to have the Fire Station 3 site area rough graded at the same time as the commercial development across Martin Avenue, which is currently scheduled for Summer 2017.

#### 4. Contract Services

#### A. Schematic Design / Design Approvals

- 1. Schematic architectural floor plan and site plan design.
- 2. Prepare architectural elevations and sections.
- 3. Prepare all documentation required for design review.
- 4. Develop schematic designs for various station systems.
- 5. Provide CEQA application support to City.
- 6. Meet with Public Safety to develop designs and discuss project progress.
- 7. Meet with City Planners to develop and present designs.
- 8. Attend (1) meeting at City Hall to meet and present project to neighbors.
- 9. Attend public hearings to present designs at the City's Planning Commission and Design Review Commission.
- 10. Provide City with 100% Schematic Design package for review.
- 11. Provide City with 100% Schematic Design cost estimate.

#### B. Design Development

1. Prepare design development documents based on the Public Safety approved schematic designs. The design development documents shall describe the size and character of the project as to the systems, materials, and other elements that may be appropriate.

- 2. Incorporate required Public Safety, City of Rohnert Park revisions and Conditions of Approval into drawings. Make necessary adjustments to program and building design based on the Public Safety team input.
- 3. Present Design Development package to Public Safety and City Project Manager.
- 4. Provide assistance to City environmental staff preparing CEQA review.
- 5. Provide City with 100% Design Development package for review.
- 6. Provide City with 100% Design Development cost estimate.

#### C. Construction Documents

- 1. Prepare construction documents (drawings and specifications).
- 2. Prepare Title 24 energy calculations.
- 3. Prepare fire sprinkler and fire alarm performance specifications.
- 4. Manage and coordinate subconsultant work.
- 5. Present CD package to Public Safety and City Project Manager.
- 6. Provide City with 50% Construction Document package for review.
- 7. Provide City with 50% Construction Document cost estimate.
- 8. Provide City with 90% Construction Document package for review.
- 9. Provide City with 90% Construction Document cost estimate.

#### D. Permitting

- 1. Assist Public Safety and City to obtain a building permit.
- 2. Prepare all required documents for permits.
- 3. Submit documents to Building Permit Authority.
- 4. Make necessary revisions to construction documents (plans and specifications) required by Plan Check process to obtain permit.
- 5. Provide supporting documentation needed for City environmental staff to complete the CEQA review process.

#### E. Bidding

- 1. Assist Public Safety and City with bidding.
- 2. Attend Pre-Bid Walk with prospective Contractors.
- 3. Respond to Bidding Questions.
- 4. Issue Addenda as directed by Public Safety and the City.
- 5. Issue Conformed Set.

#### F. Construction Administration

- As directed by the City on 1/11/17, we have excluded architectural construction administration (Items 2 – 13 listed below) from this fee proposal at this time. Subconsultants will provide construction administration services as noted in their attached fee proposals.
- 2. Attend Pre-Construction Meeting.
- 3. Review shop drawings and submittals for conformance to design intent.
- 4. Attend bi-weekly field site meetings.
- 5. Respond to requests for information.
- 6. Issue bulletins as required for clarification.
- 7. Maintain logs for RFI's, bulletins, and submittals.
- 8. Review payment applications.
- 9. Review preliminary change orders.
- 10. Prepare change orders.
- 11. <u>Final Punch List</u>: Visit site and prepare list for Contractor when project is substantially complete and has received final cleaning.
- 12. <u>Conformed Documents & Record Drawings</u>: General Contractor will maintain an up-to-date set of construction drawings posted with all addenda, bulletins, RFI responses, etc. throughout project, and upon completion will be responsible to provide the client with conformed-to-construction, as-built record drawings at the end of the job. The Design Team will review the Contractor's record drawings for general responsiveness and completeness, but it will be each Contractor's responsibility to prepare record drawings per the recommendations of the Architect and requirements of the client.
- Review Close Out Documentation for completeness: O&M Manuals, Warrantees
- 14. <u>Construction Administration Time Estimate</u>

See attached Exhibit 3 ("The C.A. Curve") Construction Duration: 13 months / 56 weeks

Based on the scale and complexity of this project, and the desired level of services itemized above, we anticipate the following hours will be required to provide a minimum level of construction administration services:

CA PHASE	CA HOURS / WEEK	WEEKS	HOURS	
Ramp Up:	5	1	5	
Submittal Review:	40	6	240	
Administration:	5	44	220	
Punch List:	35	1	35	
Subtotal			500	hours
Close Out:	5	4	20	hours
TOTAL ESTIMATED H	OURS *	56	520	hours

\* There are many aspects of Construction Administration that are outside the control of the Design Team that affect the amount of time spent servicing the project, such as 1) the amount of unforeseen conditions associated with existing sites and buildings; 2) the quantity and quality of email correspondence from the Contractor, Project Inspector, and Client; 3) the quantity and quality of RFI's produced by the Contractor; 4) the quality of submittals prepared by Contractor and subsequent re-submittals; 5) the quantity and quality of PCO's produced by the Contractor combined with the preparation of formal Change Orders; 6) meetings in addition to the regularly scheduled weekly construction meetings (i.e. site visits to resolve urgent construction issues); 7) the specific duration of the Punch List process based on Contractor performance; and 8) the general duration of construction and close-out as determined by the Contractor's performance. The total hours listed above is an estimate; more time may actually be required.

#### 5. General Conditions

- A. Carl Campos (CA License No. C10482), David Bogstad (CA License No. C21379), and Peter Stackpole (CA License No. C16939) are licensed by the California Architects Board as architects in the State of California and are employees of Loving Campos Associates Architects, Inc., dba LCA Architects Inc., a California Corporation.
- B. Carl Campos, David Bogstad and Peter Stackpole may not be able to personally represent this project at every meeting or public hearing. A senior professional employee will be available to represent the Architect in the event a principal is not available.
  - 1. Principal-in-Charge: Carl Campos
  - 2. Project Manager: Brent Randall

#### 6. Conclusion & Agreement

We appreciate the opportunity to assist you with this project, and look forward to being of service. If this proposal is acceptable we would be pleased to enter into a Consultant Services Agreement (CSA) with the City of Rohnert Park.

Please call me if you have any questions.

Best regards,

**Carl E. Campos, CEO** LCA Architects Inc. Lic. No. C10482

AGREED & ACCEPTED:

Authorized Signature

Date

Please sign and return one copy of this proposal to initiate the agreement.

#### ATTACHMENTS:

- Exhibit 1 Project Fee Schedule (2 pages)
- Exhibit 2 LCA Hourly Fee Schedule (1 page)
- Exhibit 3 Construction Administration "CA Curve"
- Exhibit 4 Fire Station No.3 Program & Design (19 pages)
- Exhibit 5 Conceptual Project Schedule dated 1/10/17 (2 pages)
- Exhibit 6 Consultant Fee Proposals

#### **EXHIBIT 1**

### **PROJECT FEE SCHEDULE**

1. Project Fee Schedule		
LCA Architects	Fee	Fee Type
A. Schematic Design / Design Approval	\$30,000.00	FIXED
B. Design Development	\$45,000.00	FIXED
C. Construction Documents	\$95,000.00	FIXED
D. Permitting	\$18,000.00	FIXED
E. Bidding	\$4,200.00	FIXED
		\$192,200.00

Project Fee Total *		\$389,675.00
For all Sub-Consultant Fee Proposals, see Exhibit 6		
Consultant Total		\$197,475.00
D13 – Cost Estimation: Gleeds	\$20,500.00	FIXED
D06 – Landscape: Camp & Camp	\$18,915.00	FIXED
D04 – Title 24: Duct Testers	\$450.00	FIXED
D04 – MEP: <b>FARD</b>	\$59,250.00	FIXED
D03 – Struct: Crosby	\$44,960.00	FIXED
D02 – Civil: Brelje & Race	\$53,400.00	FIXED

F. Construction Administration <sup>1</sup>	\$88,400.00	FEE ESTIMATE BILLED HOURLY

\$88,400.00

<sup>1</sup> Fee Estimate for Fire Station 3 is limited to 520 hours (13 months at an average of 40 hours/month)

#### 2. Fee Schedule Notes

- A. These fees will be billed in keeping with the progress of our work and are due and payable (with no retention) within **30 days** upon the client's receipt of billing invoice from LCA Architects.
- B. This fee quote is good for **30 days.**
- C. Proposal based on project commencing immediately and being completed by **October 2018.**
- D. <u>Reimbursables</u>: To be billed at cost + 15%, see Exhibit 2.
- E. <u>Additional Services</u>: Services in addition to the basic scope of work shall be provided on an hourly basis or a mutually agreed upon fixed fee. The rates and multipliers for additional services shall be per the Hourly Fee Rate Schedule attached as **Exhibit 2**.

#### 3. Fee Exclusions

- Construction Administration
- Construction Management
- PG&E Application for Power Upgrade
- Permit Fees
- Owner to furnish geotechnical and geo-hazard reports.
- Owner to furnish Topographical Maps and/or Boundary Surveys
- Destructive Testing
- Hazardous material abatement
- Geotechnical Engineering
- Acoustical Engineering
- CCTV surveillance camera system (site & building)
- Resolution of unforeseen conditions
- LEED Certification
- Any consultant, engineer, or discipline not specifically identified in this proposal.



## **EXHIBIT 2**

LCA ARCHITECTS, INC. 2016 SECOND QUARTER HOURLY FEE SCHEDULE\*

DESCRIPTION	HOURLY RATE
Principal	\$210.00
Associate	\$190.00 to \$210.00
Project Manager	\$190.00
Project Architect	\$135.00 to \$180.00
Quality Control Manager	\$190.00
Specifications Writer	\$190.00
Job Captain	\$110.00 to \$125.00
Designer	\$90.00 to \$170.00
CAD Tech	\$90.00 to \$135.00
Project Coordinator	\$95.00 to \$130.00
Administration / Research / Presentations	\$90.00 to \$105.00
Clerical	\$105.00
Architectural Animation Preparation of computer generated views, renderings and simulations of architectural interiors and exteriors. Preparation of video "fly-by's," walkthrough's, and other simulations.	\$165.00
<i>Expert Witness</i> Review of documents, meetings, site visits, telephone conferences, administration of the documents and materials, research, deposition, testimony, court appearances, and travel time.	\$500.00
Perspective Sketches and Renderings, Visual Simulations	On a Per Drawing Basis
Mileage (outside of the Walnut Creek area) **as adjusted by IRS guidelines	\$0.655 / mile **

### express mail, courier service, and travel will be billed on a reimbursable basis.

*Overtime:* If overtime is required by staff, to meet a customer's timing request, additional hourly fee charges may apply. California employment law will apply.

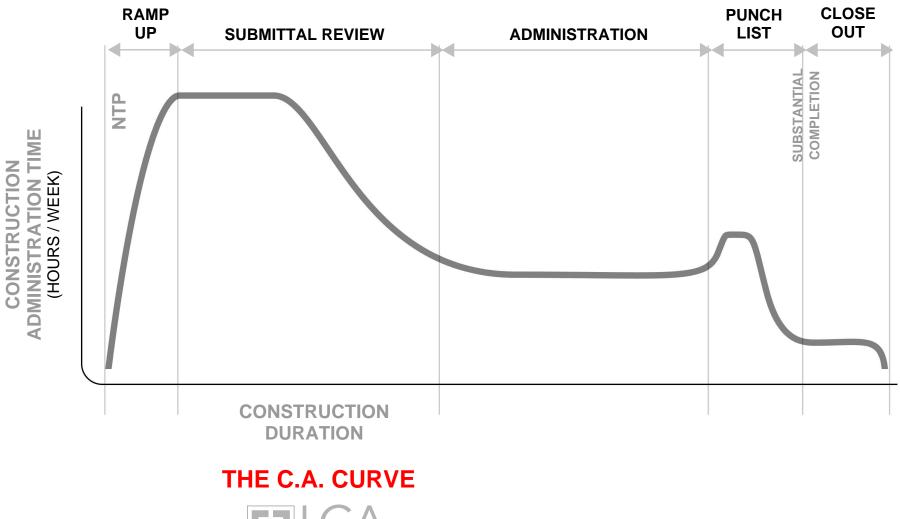
\* Effective 4 / 1 / 2016. Subject to change quarterly.

#### LCA ARCHITECTS

590 Ygnacio Valley Road Suite 310 Walnut Creek, CA 94596 **T** 925.944.1626

1970 Broadway Suite 800 Oakland, CA 94612 **T** 510.272.1060

## **EXHIBIT 3**









590 Ygnacio Valley Road, Suite 310, Walnut Creek, California 94596 | (925) 944-1626 | www.lca-architects.com

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PUBLIC SAFETY & PUBLIC WORKS FACILITY NEEDS ASSESSMENT & MASTER PLAN

LCA Architects | LCA 16024

## CITY OF ROHNERT PARK PUBLIC SAFETY

## **FIRE STATION No. 3 PROGRAM DOCUMENT &** CONCEPTUAL DESIGN

FINAL 12 / 29 / 2016

## #16024 | B08



**RESTRICTED ARCHITECTURAL DRAWINGS** © 2016 LCA Architects





#### City of Rohnert Park

PUBLIC SAFETY & PUBLIC WORKS FACILITY NEEDS ASSESSMENT & MASTER PLAN

LCA Architects | LCA 16024

## PUBLIC SAFETY Final Program Document

September 14, 2016



#### Categorization

The program is divided between Building Spaces and Site Areas.

There are five categories of Building Spaces:

- D Dormitories
- L Living Quarters
- A Apparatus Bay
- R Resource (Fire & Police)
- S Support

There are two categories of Site Areas:

- SI Site (Fire Station No.3)
- T Training Facilities

#### Areas

Areas listed are NET, which means the clear, usable area. For buildings, this means the area contained within walls. For site, this means the area required for the program element.

#### BUILDINGS

In order to establish the GROSS Area for buildings—which, in addition to including all of the program spaces delineated in this document, includes circulation, stairs, elevators, mechanical rooms, electrical rooms, and walls—this can either be done by 1) adding up all the program spaces and multiplying the sum by an estimated factor, or 2) preparing conceptual floor plans based on specific site constraints and calculating the area contained within the footprint of the building(s).

#### SITE AREAS

In terms of site areas, we will be approaching this effort from the starting point of existing City-owned parcels of land and working within the available land. In addition to the Site Areas listed in this document, other considerations factor into how much land is required for the facilities, such as vehicle access, truck and heavy equipment turning radii, landscape areas, sidewalks, accessible path of travel, drive aisles, storm water treatment on site, and utilities.

#### **Ideal Program**

The spaces and comments included in this document represent a starting point for an ideal program based on the input received from the City of Rohnert Park Public Safety Department. This initial program may need to be adjusted and modified depending on the actual site conditions and budgetary constraints.

#### Abbreviations

SF = square feet TBD = to be determined NFPA = National Fire Protection Association

590 Ygnacio Valley Road, Suite 310, Walnut Creek, California 94596 | (925) 944-1626



# BUILDING SPACES

#### GENERAL

- Fire Station No.3 (Westside Station)
- Security of fire fighters from threats external to the building is important.
- Anticipated Staff: (1) Captain, (1) Engineer, and (1) Firefighter
- Day Room / Kitchen / Dining Area should be one, large, open space.
- Provide security access key pads at all exterior doors
- Fire Station needs to be designed with secure, separate zones: Exterior / Apparatus / Living / Dorms. Study how to best facilitate access by firefighters while limiting access by outside groups (utility companies, outside vendors, visiting school children, community events, etc.)
- Alerting System to be tied into PA system with progressive lighting/alerting
- Building to have secure WIFI

## 1. DORMITORIES

ID:	D1
USE:	Dormitory
QUANTITY:	3
NET AREA:	200 SF / Dorm & Locker Area

CONSIDERATIONS:

#### 1) (3) dormitories minimum

- 2) (1) additional dormitory required for future growth
- 3) Dormitory room to contain (1) bed and (1) nightstand for fire fighter on shift.
- 4) Provide electrical outlet inside dorm locker for charging equipment.
- 5) Provide data and power outlets at bed and desk for connection of mobile devices.
- 6) Provide HVAC with separate thermostat control for each dormitory.
- 7) Provide separate area prior to dormitory for shift lockers (minimize disruptions for staff on duty).
- 8) Each Dormitory to have a dedicated Dorm Locker Area
- 9) Each Dorm Locker Area to have (6) tall lockers (2 per staff) for equipment (fire & police), bedding, and personal clothing / items. Provide additional lockable storage above tall lockers.
- 10) (1) double locker per Fire Fighter x 3 shifts x 3 Fire Fighters per Shift = 9 lockers minimum
- 11) Provide (3) extra double lockers for an additional (3) Fire Fighters to accommodate staff working overtime and workers comp backfill.
- 12) Organize dormitories to be private and separate from Living Quarters.



ID:	D2
USE:	Laundry Area
QUANTITY:	1
NET AREA:	20 SF
CONSIDERATIONS:	

1) Provide Washer and Dryer for sheets and personal clothing.

QUANTITY:	
NET AREA:	120 SF
CONSIDERATIONS.	

- 1) (2) accessible staff restrooms minimum
- 2) (1) additional restroom required for future growth
- 3) Provide wall-mounted toilet, countertop with sink, and shower with tall showerhead.
- 4) No urinals.
- 5) Organize restrooms to be private and separate from Living Quarters.

## 2. LIVING QUARTERS

ID:	L1		
USE:	Day Room		
QUANTITY:	1		
NET AREA:	350 SF		
CONSIDERATIONS:			

1) Should be located adjacent to the **Dining Area** (see **Item L3**)

ID	L2
USE	Kitchen
QUANTITY	: 1
NET AREA	
CONSIDERATIONS	

- 1) Need kitchen area to accommodate 10 people.
- 2) Need (3) refrigerators (one per shift)
- 3) Need (3) tall storage pantry cabinets (one per shift)
- 4) All kitchen appliances need to be minimum Commercial grade (no residential)
- 5) Should be located adjacent to the **Dining Area** (see **Item L3**)



ID:	L3
USE:	Dining Area
QUANTITY:	1
NET AREA:	250 SF
CONSIDERATIONS.	

- 1) Provide table and chairs for 10 people.
- 2) Should be located adjacent to the Staff Patio (see Item SI-3)

## **3. APPARATUS BAY**

ID:	A1
USE:	Apparatus Bay
QUANTITY:	1
NET AREA:	4,500 SF

CONSIDERATIONS:

QU

- 1) Need (3) 20 feet wide x 75 feet long apparatus bays
- 2) Length of apparatus bay needs to be able to accommodate an aerial ladder truck.
- 3) All apparatus bays should be designed for drive-through access.
- 4) Roll-up door access should be 14 feet wide x 16 feet high.
- 5) Roll-up doors to have one-way glazing (maintain privacy and security of garage)
- 6) Provide clearance of 20 feet to underside of roof structure.
- 7) Need space for (1) Aerial Ladder Truck, (2) Fire Engines, and (2) utility trailers.
- Concrete apron required in front of the fire apparatus bays exiting on to public street.
- 9) Provide sealed concrete floor for safety and longevity.
- 10) Provide overhead, compressed air pull-downs (150 psi minimum), water pull-downs, and electrical power lines with Shore Line disconnects in order to keep fire apparatus operational.
- 11) Provide capture-at-source exhaust system at each bay.
- 12) Provide general exhaust air system for garage.
- 13) Provide heating system for garage.
- 14) Provide drinking fountain with water bottle fill station.
- 15) Provide ice-maker
- 16) Room to be designed to contain spills.



ID: A2 USE: Turnout Gear QUANTITY: 1 NET AREA: 200 SF

#### CONSIDERATIONS:

- 1) Protect Personal Protective Equipment (PPE) from ultraviolet light (NFPA requirement).
- 2) Provide open connection to Apparatus Bay (see Item A1) for easy, daily access.
- 3) Best if located adjacent to exit from Living Quarters for quick access.
- 4) Best if located adjacent to Extractor / Dryer (see Item A5)
- 5) Provide minimum (9) turnout lockers if 3 Dormitories are provided.
- 6) Provide minimum (12) turnout lockers if 4 Dormitories are provided.
- 7) Provide additional (3) turnout lockers for (3) Fire Fighters to accommodate staff working overtime and workers comp backfill.
- Lockers to be sized to hold boots, hats, wildland gear and (2) sets of PPE gear. Example: <u>Ready Rack - Turnout Gear Racks</u>

ID:	A3
USE:	Decontamination Room
QUANTITY:	1
NET AREA:	80 SF
CONSIDERATIONS:	

- 1) Provide room for decontamination & cleaning prior to entering the Fire Station.
- 2) Provide utility sink, floor drain, and hose bib for washing down the room.
- 3) Provide clean air supply with exhaust air system.
- 4) Room to be designed to contain spills.
- 5) Best if directly connected to **Decon Shower** (see **Item A4**) with 3'6" door.
- 6) Provide sealed door connection to Apparatus Bay (see Item A1)

ID:	A4
USE:	Decontamination Shower
QUANTITY:	1
NET AREA:	80 SF

CONSIDERATIONS:

- 1) Provide exterior open-air shower for gross decontamination prior to entering the Fire Station.
- 2) Locate adjacent to Apparatus Bay (see Item A1)
- 3) Provide cold/hot shower with tall showerhead / connections for hose wash-off.
- 4) Area to be accessible yet contained with curbs with floor drain.
- 5) Room to be designed to contain spills.



ID:	A5
USE:	Extractor / Dryer
QUANTITY:	1
NET AREA:	100 SF
CONSIDERATIONS	

#### 1) Provide open connection to Apparatus Bay (see Item A1) for easy access.

- 2) Area to be accessible yet contained with curbs with floor drain.
- 3) Provide water connections and ventilation of space.
- 4) Room to be designed to contain spills.
- 5) Provide Extractor & Dryer for cleaning PPE's / Fire Turnouts Reference: <u>Continental Girbau - Fire Department Extractors & Dryers</u>

ID:	A6
USE:	Spare Hose
QUANTITY:	1
NET AREA:	100 SF
CONSIDERATIONS:	

- 1) Need area for storage of 2,000 to 3,000 linear feet of fire hose.
- 2) Example: <u>Ready Rack Mobile Hose Cart</u>

ID:	A7
USE:	Breathing Air Fill Station
QUANTITY:	1
NET AREA:	100 SF
CONSIDERATIONS:	

- 1) Provide area for stationary cascade system & fill stations.
- 2) Provide storage racks for SCBA's (self-contained breathing apparatus)
- Provide secure door connection to Apparatus Bay (see Item A1)
   Example: <u>Bauer Compressors Auto Cascade System with Fill Station</u>

A8	ID:
EMS Supplies	USE:
1	QUANTITY:
100 SF	NET AREA:
	CONSIDERATIONS:

- 1) Provide lockable tall cabinets and open shelving for storage of EMS supplies.
- 2) Room to be clean and sterile.
- 3) Provide secure, sealed door connection to Apparatus Bay (see Item A1)



ID:	A9
USE:	Disaster Preparedness Storage
QUANTITY:	1
NET AREA:	80 SF
CONSIDERATIONS:	

- 1) Provide open shelving for storage of supplies.
- 2) Need area to store gloves, cots, and MRE's (Meals Ready to Eat)
- 3) Provide secure door connection to Apparatus Bay (see Item A1)

CONSIDERATIONS:

- 1) Provide workbench, storage cabinets, and shelving
- 2) Need area to maintain fire equipment.
- 3) Provide secure door connection to Apparatus Bay (see Item A1)

	ID: <b>A1</b>	1
U	SE: De	fensive Tactics
QUANT	ITY: <b>1</b>	
NET AF	REA: 20	0 SF
CONSIDERATIC	NS:	

- 1) Provide secure double door connection (pair of 3'6" doors) to Apparatus Bay (see Item A1)
- 2) Need area to store rolling training mats & equipment. Example: SportsGraphics - Roll Out Mats

## 4. RESOURCE (FIRE & POLICE)

ID:	R1
USE:	Captain's Office
QUANTITY:	1
NET AREA:	160 SF
CONSIDERATIONS:	

- 1) Provide data and power connection for (1) computer workstation.
- 2) Room to be private—no public visibility to other rooms.



ID:	R2
USE:	Shared Office
QUANTITY:	1
NET AREA:	160 SF

#### CONSIDERATIONS:

- 1) Provide desktop for (3) computer workstations.
- 2) Room to be private—no public visibility to other rooms.
- 3) Situate toward the front of the facility so that police officers can access this room without disrupting the rest of the Fire Station.

R3
Exercise Room
1
450 SF

CONSIDERATIONS:

С

- 1) Provide adequate space / ceiling height for exercise equipment.
- 2) Acoustically isolate the room.
- 3) Provide adequate ventilation.
- 4) Provide connection to exterior.

ID:	R4
USE:	Communications
QUANTITY:	1
NET AREA:	60 SF

#### CONSIDERATIONS:

- 1) Provide countertop and cabinetry for base radio station.
- 2) Provide closet for UPS (Uninterruptible Power Supply) for radio.
- 3) Provide desk area with stool for dispatcher station with a backup base station.
- 4) Provide wall space for City Map
- 5) Provide open connection to corridor leading to Apparatus Bay exit for easy access.

ID: USE: QUANTITY: NET AREA:	R5 Weapon Storage 1 60 SF
CONSIDERATIONS:	

- 1) Provide gun safe for secure storage of guns and ammunition.
- 2) Room to be secure; keep weapons out of sight.
- 3) Provide clearing barrel outside behind the Fire Station.

## 5. SUPPORT

ID:	S1
USE:	Public Lobby
QUANTITY:	1
NET AREA:	120 SF

#### CONSIDERATIONS:

- 1) Provide exterior entry clear and visible from the public right of way.
- 2) Provide area for general public to sit and wait.
- 3) Provide control zone / man trap for public entry (no access to rest of station).
- 4) Provide secure door connection to the rest of the Fire Station.

ID:	S2
USE:	Public Unisex Bathroom
QUANTITY:	1
NET AREA:	80 SF
CONSIDERATIONS:	

- 1) Accessible single-occupant restroom.
- 2) See 2013 CBC 11B-206.2.4 (Accessible path of travel required to connect all accessible spaces and elements within the building) & 2013 CBC 11B-213 (Public Building Toilet Facilities). Because toilet facilities are being provided on this site, the public is entitled to access them. By providing a dedicated restroom for the public, this keeps the general public from entering into the administration area to use those bathrooms.
- 3) Should be connected to **Public Lobby** (see Item S1).

ID:	S3
USE:	Custodial
QUANTITY:	1
NET AREA:	80 SF
CONSIDERATIONS:	
1) Provide mop si	ink.

- 2) Provide utility sink.
- 3) Provide storage shelves.

ID:	S4
USE:	Fire Station Server Room
QUANTITY:	1
NET AREA:	80 SF
CONSIDERATIONS:	

1) Provide secure room for communications equipment and server.

- 2) Provide area for IT staff to work on system.
- 3) Room to be climate-controlled.



ID: S5 USE: Citywide Server Room QUANTITY: 1 NET AREA: 500 SF

#### CONSIDERATIONS:

- 1) Provide secure, exterior access for IT staff (avoid disrupting the Fire Station).
- 2) Provide doored vestibule prior to entering the Server Room.
- 3) Room to be designed as a Clean Room (dust-controlled environment).
- 4) Provide raised access floor with seismic restraints for all racks.
- 5) Provide adequate power to accommodate future growth.
- 6) Provide minimum (5) four-post racks centered within the room.
- 7) Provide room for additional servers and spare conduits to grow.
- 8) Room must be climate-controlled
- 9) Room to be connected to the Emergency Generator for UPS (See Item SI-4)
- 10) Provide area for (2) IT staff to work on system.
- 11) Provide separate room for Gas Fire Suppression System.



# SITE AREAS

#### GENERAL

- Security: Site be fenced and gated with cameras, alarms, and site lighting. Need lighting for security and to deter theft and protect vehicles and equipment. Provide gate with remote control access / security card access pad. Site access and building access with cards using City standard.
- If Fire Station situated adjacent to public works corp yard, provide physical separation to avoid accidents and potential conflicts between vehicular traffic
- Shared Resource: Fuel Station (see Public Works Item SI-4) fuel station on driver's side
- Shared Resource: Vehicle Wash (see Public Works Item SI-5)
- All concrete pavement areas to be designed to contain spills, with all drains connected to interceptor system before being discharged into sewer system.
- Provide (2) fire hydrants at Fire Station to fill apparatus and for training exercises.
- Address annual flooding concerns for the Laguna de Santa Rosa
- Provide low-maintenance / xeriscape landscaping (keep irrigation to a minimum)
- Allow area for storm water treatment on-site.

## 1. SITE (FIRE STATION)

ID:	SI-1
USE:	Visitor Public Parking
QUANTITY:	2 stalls
NET AREA:	162 SF / Parking Space
CONSIDERATIONS:	

- 1) At front of the property, accessible to the public.
- 2) 9 feet wide x 18 feet long parking stalls.
- 3) Provide accessible path of travel to front of building (see Item S1)

ID:	SI-2
USE:	Staff Parking
QUANTITY:	6 stalls
NET AREA:	162 SF / Parking Space
CONSIDERATIONS:	

- 1) Within the property, protected by fencing and gated access.
- 2) 9 feet wide x 18 feet long parking stalls.



SI-3	ID:
Staff Patio	USE:
1	QUANTITY:
250 SF	NET AREA:

#### CONSIDERATIONS:

- 1) Provide shade canopy with (2) picnic tables.
- 2) Provide gas connection for grill.
- 3) Should connect to the Kitchen (see Item L2) and/or Dining Area (see Items L3)

ID:	SI-4
USE:	Emergency Generator
QUANTITY:	1
NET AREA:	250 SF
CONSIDERATIONS:	

- 1) Must be provided for Essential Service Facility.
- 2) If Fire Station situated adjacent to Public Works Corp Yard, then connect emergency generator to Fuel Station. If not, then provide fuel storage capacity on site and sized to run the station with uninterrupted power for required amount of days.
- 3) Provide sound-rated, ventilated enclosure to muffle engine noise, and protect generator from direct sunlight and weather.
- 4) Situate generator away from Dormitories (see Item D1)
- 5) Locate adjacent to the Fuel Station (see Public Works Item SI-4)
- 6) If Fire Station situated adjacent to Public Works Corp Yard, then investigate cost increase to upsize the generator to also provide emergency power to Public Works.

	D: <b>SI-5</b>	
US	E: Hose Drying	
QUANTI	ry: <b>1</b>	
NET ARE	A: 250 SF	
CONSIDERATION	S:	

- 1) Provide area & drainage for 5 feet wide x 50 feet long, sloped rack
- 2) Example: <u>Geargrid Windsor Outdoor Hose Drying Rack</u>



## 2. TRAINING FACILITIES

#### GENERAL

- Training facilities will not be included as part of the project at this time.
- If possible, provide area & utility connections for future training facilities.

	ID: T	1		
	USE: T	raining Room		
QUAI	NTITY: <b>1</b>	-		
NET	AREA: <b>1</b>	,600 SF		
CONSIDERAT	IONS:			

- 1) Building must be accessible and connected to accessible parking.
- 2) Provide audiovisual capabilities for computer-simulated "tabletop" training.
- 3) Provide room for up to 50 people to gather together.
- 4) Provide kitchenette (sink, microwave, small refrigerator, and coffee bar).
- 5) Provide interactive display and/or computer projection system.
- 6) Provide WIFI for mobile devices to access internet.
- 7) Provide secure, controlled external access.
- 8) Provide storage closet for chairs & tables.
- 9) Provide (2) public unisex bathrooms with accessible drinking fountain

#### IF THIS FACILITY IS ASSOCIATED WITH THE FIRE STATION, THEN...

- 10) Provide exterior entry clear and visible from the public right of way.
- 11) Room can be used as a **Community Room**
- 12) Set up room to function as an Emergency Operations Center (EOC)
- 13) Room to be connected to the Emergency Generator.
- 14) Room needs to be able to operate independently from Fire Station.
- 15) Potentially use adjacent commercial parking lots for additional staff vehicles.

#### IF THIS FACILITY LOCATED REMOTE TO THE FIRE STATION, THEN...

- 16) Provide exterior entry clear and visible from within the training area.
- 17) Bathrooms to have exterior entrances.
- 18) Provide covered patio area.



ID: T2 USE: Training Area QUANTITY: 1 APPROX. AREA: 50,000 SF CONSIDERATIONS:

1) Need exterior concrete pavement area for various training exercises: hose evolutions, pump evolutions, ladders, vehicle extrications, etc.

#### 2) Provide Draft Pit

- Could be stationary or mobile.
   Example: <u>Weis Fire Equipment Draft Commander</u>
- 3) Provide Training Tower Example: <u>Fire Training Structures - Training Tower</u>
  - 3-Stories
  - Protected Stairwell Design
  - Pre-Plumbed with Sprinklers
  - Provide Fire Department Connections
  - Provide Anchor Points

#### 4) Provide Live Burn Trailer

Could be stationary or mobile.
Example: <u>Drager - Containerized Live Fire Training System (CLFTS)</u>

#### 5) Provide Flashover Simulator

- Could be stationary or mobile.
   Example: <u>Fire Training Structures Flashover Simulator</u>
- 6) Provide Modular Shooting Range (4 Conex boxes) Example: <u>Shooting Range Industries - Modular Shooting Range</u>
- 7) Need parking area for (3) apparatus from outside agencies.
- 8) Need parking area for (20) staff vehicles attending training sessions.

#### IF THIS FACILITY LOCATED REMOTE TO THE FIRE STATION, THEN...

- 9) **Security:** Training area to be fenced and gated with cameras, alarms, and site lighting. Provide gate with remote control access / security card access pad. Site access and building access with cards using City standard.
- 10) Provide (2) fire hydrants to fill apparatus and for training exercises.
- 11) Provide hose drying area if training area is remote from Fire Station (see Item SI-5)
- 12) Provide drinking fountain with water bottle fill station.
- 13) Provide ice-maker



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PUBLIC SAFETY & PUBLIC WORKS FACILITY NEEDS ASSESSMENT & MASTER PLAN

LCA Architects | LCA 16024

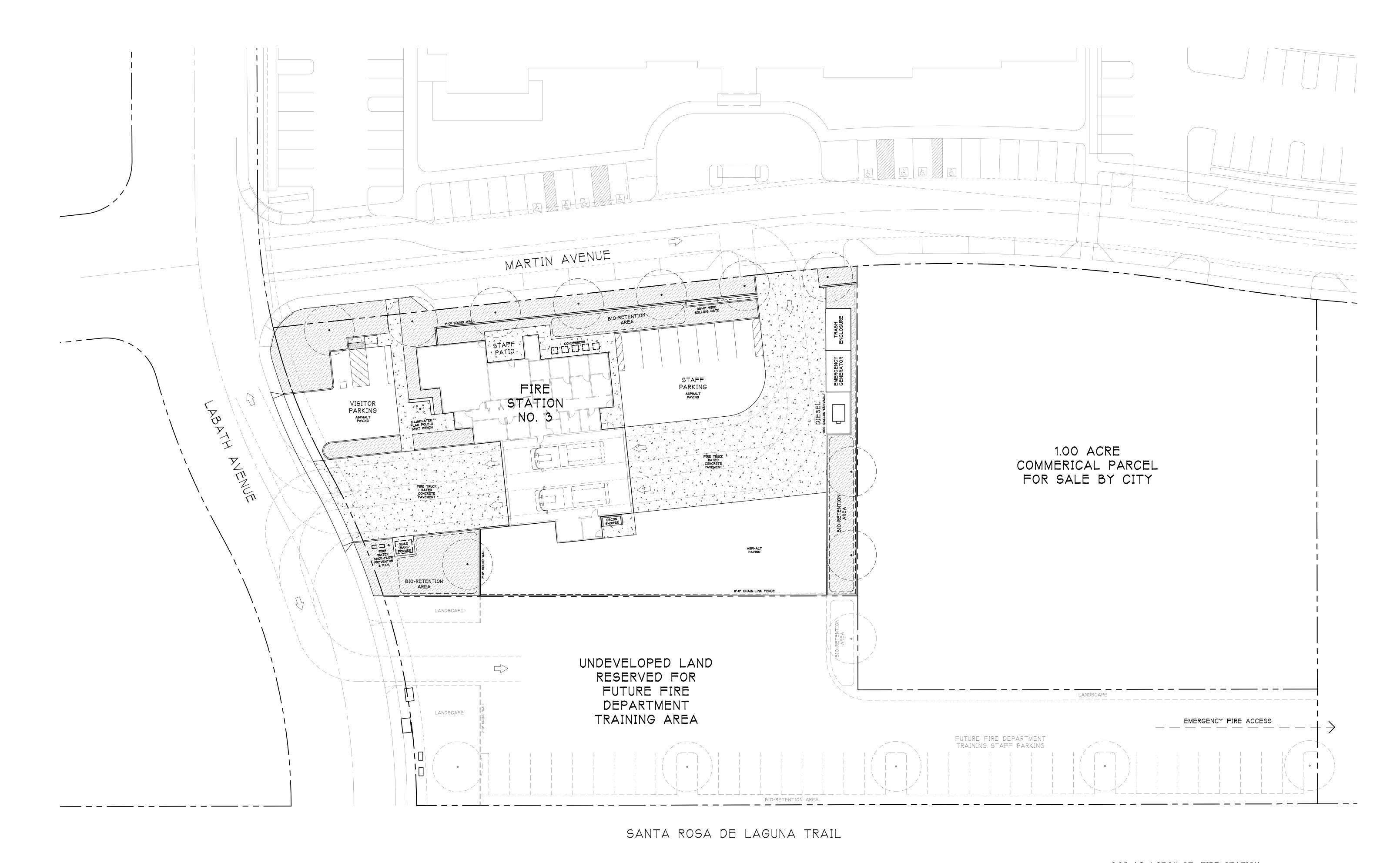
## FIRE STATION **OPTION 2B.3**

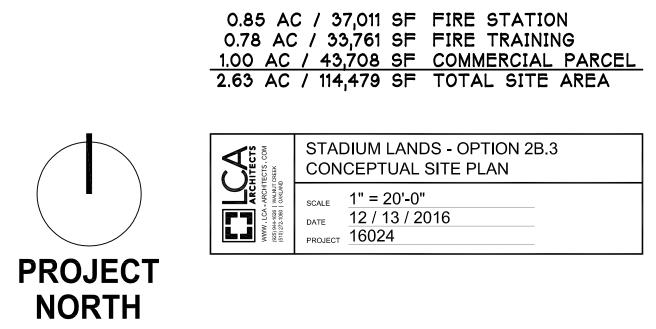
### **CONCEPTUAL DESIGN** 12 / 13 / 2016

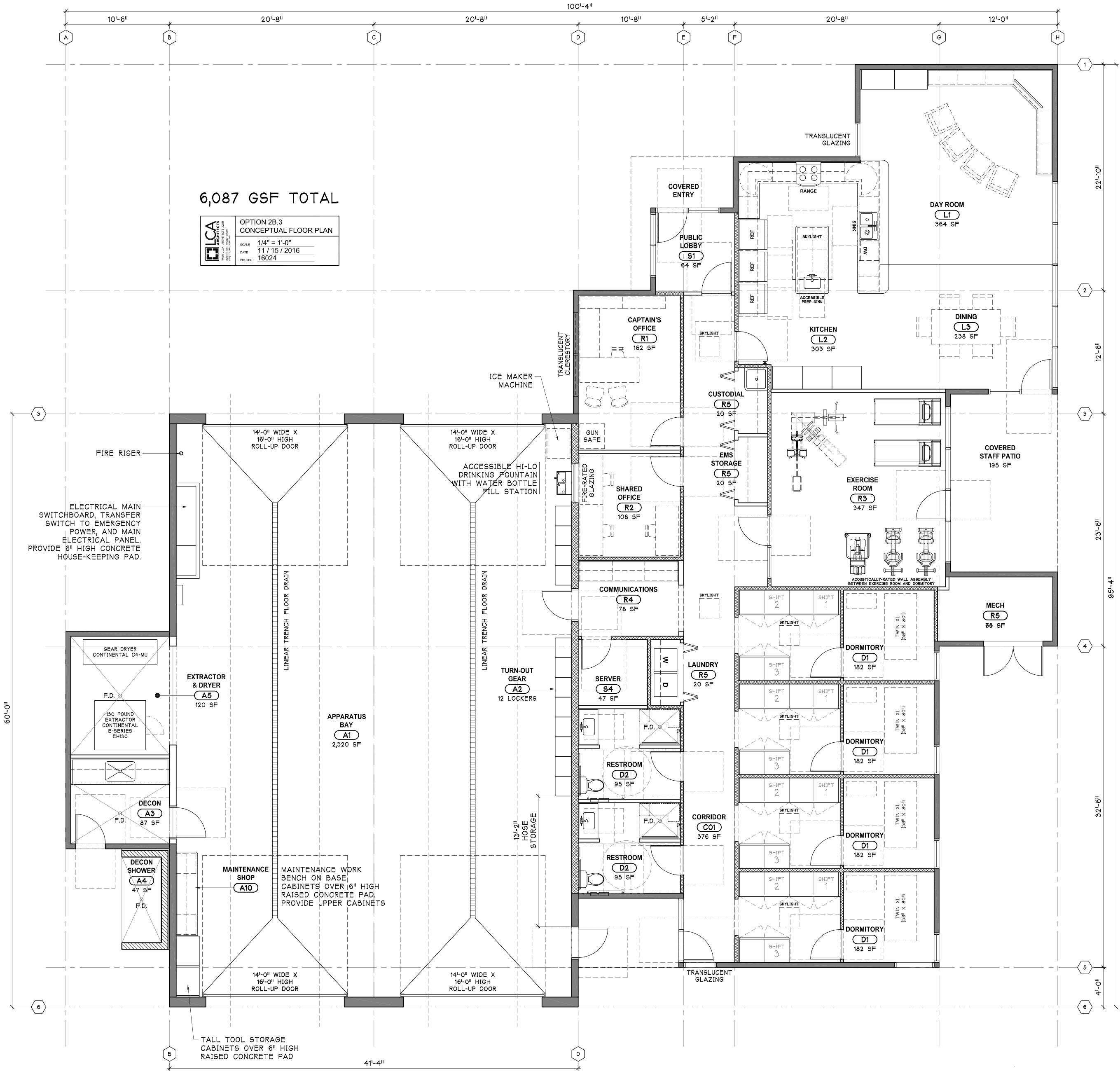
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## CONCEPTUAL PROJECT SCHEDULE

## DESIGN TEAM SELECTION (3 months)

12/9/16	Friday	Submit informal list of subconsultants to City for review
12/9/16	Friday	Receive authorization from City to prepare formal proposal
1/10/17	Tuesday	Provide City with formal fee proposal
		Negotiations & Formalization of Design Contract
2/28/17	Tuesday	Anticipate City Approval of Design Contract / Notice to Proceed

## DESIGN (5 months)

3/1/17	Wednesday	Start <b>Schematic Design</b>
4/7/17	Friday	100% SD Set (drawings) delivered to City
4/10/17	Monday	Start <b>Design Development</b>
4/14/17	Friday	100% SD City Review Comments Due
4/18/17	Tuesday	LCA 100% SD Review Comments due to Consultant Team
4/18/17	Tuesday	Draft 100% SD Cost Estimate due from Estimator to LCA
4/21/17	Friday	100% SD Cost Estimate delivered to City
5/5/17	Friday	Draft 100% DD Set due from Consultants to LCA
5/12/17	Friday	100% DD Set (drawings) delivered to City
5/15/17	Monday	Start <b>50% CD</b>
5/19/17	Friday	100% DD City Review Comments Due
5/23/17	Tuesday	LCA 100% DD Review Comments due to Consultant Team
5/23/17	Tuesday	Draft 100% DD Cost Estimate due from Estimator to LCA
5/26/17	Friday	100% DD Cost Estimate delivered to City
6/9/17	Friday	Draft 50% CD Set (drawings & specs) due from Consultants to LCA
6/16/17	Friday	50% DD Set (drawings & specs) delivered to City
6/19/17	Monday	Start <b>90% CD</b>
6/23/17	Friday	50% CD City Review Comments Due
6/27/17	Tuesday	LCA 50% CD Review Comments due to Consultant Team
6/2717	Tuesday	Draft 50% CD Cost Estimate due from Estimator to LCA
6/30/17	Friday	50% CD Cost Estimate delivered to City
7/21/17	Friday	Draft 90% CD Set (drawings & specs) due from Consultants to LCA
7/28/17	Friday	90% DD Set (drawings & specs) delivered to City & Building Dept.

## AGENCY APPROVALS (1 month)

	Monday	Start City Building Department Plan Check
8/11/17	Friday	90% CD City Review Comments Due
8/15/17	Tuesday	LCA 90% CD Review Comments due to Consultant Team
8/15/17	Tuesday	Draft 90% CD Cost Estimate due from Estimator to LCA
8/18/17	Friday	90% CD Cost Estimate delivered to City
8/31/17	Friday	Anticipate City Approval of Construction Documents
		(address all Building Department comments & City Review Comments)

## BIDDING (2 months)

8/14/17 9/8/17 9/22/17	,	Bidding / Start Advertising Issue Addendum to address City Review comment changes BIDS OPEN
9/22/17	FILLAY	Negotiations & Formalize Construction Contract
9/29/17	Friday	Issued Conformed Set
10/27/17	Friday	Anticipated City Approval of Construction Contract

## CONSTRUCTION (11 months)

10/30/17	Monday	Construction – Notice to Proceed
8/24/18	Friday	Final Cleaning / Project Ready for Punch List

## PUNCH LIST (1 month)

8/31/18	Friday	Punch List Walk
9/14/18	Friday	Punch List Verification Walk
9/27/18	Thursday	All Punch List Work Done
9/28/18	Friday	Construction – Substantial Completion

## CLOSE OUT (1 month)

10/25/18	Thursday	Project Close Out Documentation Complete
		(Contractor provide record drawings, O&M Manuals, & Warrantees)
10/26/18	Friday	Fit Out Complete (kitchen, linens, exercise equipment, FF&E)
10/26/18	Friday	Architectural Photography
10/29/18	Monday	Fire Station ready for Occupancy



# D02 Civil



### EXHIBIT "A" SCOPE OF ENGINEERING SERVICES **ROHNERT PARK FIRE STATION NO. 3** PREPARED FOR **LCA ARCHITECTS** PREPARED BY **BRELJE & RACE ENGINEERS** January 9, 2017

### 1. Design Development

Review conceptual site plan, and meet with Architect and team to share potential areas of concern from an engineering standpoint. Participate in one additional team coordination meeting during this phase of the project. Utilizing the Architects AutoCAD site base, topographic survey provided by Client, and CAD design of Martin Avenue improvements provided by others, prepare civil base plan for site and share with team. Begin preparation of civil design development documents, anticipated to include a demolition plan; preliminary site grading plan; preliminary low impact storm water plan; and a wet utility plan. Determine path of travel from the ADA parking to the new building and to public sidewalk. Provide 50% Design Development plans to Architect for team review. Address team comments and complete Civil DD plans. Prepare preliminary storm water low impact development report per City of Santa Rosa Low Impact Design Manual. Prepare draft civil technical specifications. Coordinate with team members during this phase of the project. Submit civil documents to Architect for owner and team coordination reviews, and estimating. Review civil portion of estimate and provide comments.

### 2. Construction Documents

Review comments on design development submittal. Review project geotechnical investigation provided by others. Using updated digital site plan base from Architect and updated CAD design of Martin Avenue improvements, begin preparation of civil construction documents, anticipated to include a civil demolition plan; a grading plan; a wet utility plan for sewer, potable water, irrigation, fire protection, and storm drain; a pavement section and layout plan; an erosion control plan; a stormwater pollution prevention plan; and associated notes and details. Coordinate with team during this phase of the project. Prepare final Storm Water Low Impact Development report. Prepare and process hydrology/hydraulic report through SCWA for approval. Prepare civil technical specification sections in CSI format. Prepare Engineer's Opinion of Probable Cost for site improvements. Submit civil documents to Architect for City Building Department plan review. Make up to 2 sets of minor revisions based on review comments.

### 3. Bid Phase

Provide limited assistance to Architect during this phase of the project by assisting with preparation of bid addenda related to the civil documents.

### 4. Construction Administration

Provide limited assistance to Architect during this phase of the project by attending preconstruction conference at the site; reviewing submittals related to civil documents; assisting with review of and response to RFI's and COR's related to the civil work; and by making up to two visits to the site during construction to respond to contractor questions and determine compliance with design intent.

Conduct punch list walk through near completion of project. Provide punch list to Architect. Conduct follow up walk through at completion of punch list work.

### 5. Fees

Our fees for this work will be billed monthly on fixed fee basis, as follows:

Item 1.: \$17,500; Item 2.: \$28,600; Item 3.: \$1,500; Item 4.: \$5,800;

Excluding fees for reproduction and plotting services, which will be billed in addition to the engineering fees.

Total Fee for Items 1 – 4: \$53,400

### 6. Assumptions and Limitations

-Proposal assumes that client will provide engineer with design level geotechnical investigation, including estimates of infiltration rates, and grading and pavement design recommendations.

-Proposal assumes that the client will provide the engineer with a design level topographic survey sufficient for the engineering design efforts.

-Proposal assumes the improvement plans for the Martin Avenue extension will be prepared by others and that the digital CAD files for these plans will be available in a timely manner to reference in the project drawing file.

-Proposal assumes that no right of way dedication or easement preparation will be necessary for the site.

-Proposal assumes that the civil documents prepared for the site will be sufficient for the application for the encroachment permit application for the driveway on Labath Avenue and that a separate plan set for that purpose will not be required by the City of Rohnert Park. It is anticipated that new utilities will be stubbed to the right or way from the new improvements prepared for Martin Avenue.

-Proposal assumes that client will retain the services of other design professionals as needed to execute the work, including but not limited to Landscape Architect, Structural, Arborist, Geotechnical, Electrical (site lighting and automatic gates), Traffic Engineer, and Joint Utility Trench designer.

-Proposal does not include preparation of Record plans if required by the City of Rohnert Park at the completions of project improvements.

-Proposal assumes disturbed area will be less than 1 acre and preparation of a Storm Water Pollution Prevention Plan (SWPPP) will not be required.

-Proposal assumes that any environmental permitting or reports that may be necessary will be provided by consultants retained by the owner.

# PAUL V. BARTHOLOW, P.E.

### **Project Role**

Project Manager

### Education

B.S., Civil Engineering, University of California, Davis 1982

### Registration

Professional Civil Engineer, CA No. 40512

Professional Civil Engineer, NV No. 012533

California Contractors B License – 664034

Qualified SWPPP Developer and Practitioner Certificate (QSP) 22727

### **Professional Endeavors**

Brelje & Race 4/2012 to Present (Contract Employee from 4/2012 to 12/2012)

Ingenium, Inc. Vice President 1987 to 2013

Morton Technologies 1983 to 1987

### **Professional Affiliations**

American Society of Civil Engineers

California Stormwater Quality Association

International Code Council

Associate Principal, Paul Bartholow has over 30 years of experience in the civil engineering field. His experience has included the design, preparation of construction documents, and construction management of educational institutions and residential and commercial site developments and construction inspection and quality control for public sewer and water rehabilitation projects. Additional areas of specialization include preparation of site and roadway improvement design, including grading, hydrology and hydraulic studies, and storm water management and treatment.

### **Plan Check / Peer Review**

• Grading and Drainage Plan Check, County of Sonoma Permit and Resource Management Department

### Schools

- Roseland University Preparatory School, Santa Rosa
- Santa Rosa City Schools Site Assessment 23 Locations, Santa Rosa
- Lakeport Unified School District, Lakeport
- Alameda Unified School District, Alameda
- Sequoia Charter School, East Palo Alto
- Healdsburg High School Modernization, Healdsburg
- Martin Luther King Academy, Marin City
- Maria Drive Elementary School, Petaluma
- Santa Rosa Junior College ADA Upgrades, Santa Rosa
- Analy High School Stadium Modifications, Sebastopol
- El Molino High School Stadium Modifications, Forestville
- Clear Lake High School Master Plan, Lakeport
- Bay Farm Elementary School, Alameda
- Longfellow Elementary School, San Francisco
- Dougherty Valley Elementary School, San Ramon
- Flowery Elementary School, Sonoma
- Santa Rosa Junior College Plover Hall ADA Upgrades, Santa Rosa

### **Commercial Site Development**

- American AgCredit New Campus, Santa Rosa
- Bell Village Commercial Site, Windsor
- Bell Village Residential Site, Windsor
- Oakmont of Cardinal Point, Alameda

### **Construction Management**

- Alta/Almond Sewer and Water Rehabilitation Project, City of Rohnert Park
- Water System Improvements, Circle Oaks County Water District, Napa

### **Additional Experience**

### Ingenium, Inc. Santa Rosa, CA

- Design and construction management of public, residential and commercial sites
- Roadway design
- Hydrology and hydraulic studies
- Storm water management and treatment
- Land planning and development



# PAUL V. BARTHOLOW, P.E.

- Tentative map and improvement plan preparation
- Fulfilled role as Owner's Representative at public hearings and city council meetings
- Structural design analysis and details for residential projects
- Completed over 2,600 different projects for various clients throughout Northern California.



# JOHN S. THOMPSON, P.E.

**Project Role** Senior Design Engineer

#### Education

B.S., Civil Engineering, California State University, Chico, 1985

B.A., Geography, California State University, Chico, 1984

Registration

Professional Civil Engineer, CA No. 48600

### **Professional Endeavors**

Brelje & Race 1994 to Present

M. Hudis and Associates 1989 to 1994

Harding Lawson Associates 1986 to 1989

Department of Highways & Bridges, Geotechnical Engineering Bureau, Gothenburg, Sweden 1985

### **Professional Affiliations**

American Society of Civil Engineers (ASCE)

American Council of Engineering Companies, California (ACEC)

Engineering Contractors Association (ECA) – Board of Directors

Home Builders Association (HBA)

### Certifications

Qualified SWPPP Developer (QSD) #00911

John Thompson, an Associate with the firm, has more than 30 years of experience as a civil engineer and project manager involved in the planning and design of private development projects, medical facilities, and public works projects. His project experience includes the preparation of Commercial and Institutional Site Improvement Plans, Roadway Improvement Plans, Tentative Maps, Subdivision Plans, Drainage Reports, Stormwater Mitigation Plans (SUSMPs), and Storm Water Pollution Prevention Plans (SWPPPs). John also has expertise with site evaluations, environmental permitting and assistance with EIR preparation. His responsibilities include management and direction of engineering and technical staff, cost estimation, and project budget administration.

### **Plan Check / Peer Review**

• Grading and Drainage Plan Check, County of Sonoma Permit and Resource Management Department

### Healthcare

- Sutter Santa Rosa Regional Hospital Overall project management throughout the entitlement, construction document preparation, and construction administration phases for the \$300 million medical facilities campus
  - » Site planning and layout
  - » Assistance throughout the preparation of the EIR and environmental permitting
  - » Preparation of off-site roadway alignment studies
  - » Permitting with local agencies and of the project from 2008-2014.
- Kaiser MOB 6 Provided entitlement and design services for an 87,000 SF medical office building located on 6.7 acres in Southwest Santa Rosa.

### Roadway

- Mark West Springs Road Highway 101 to Old Redwood Highway
- Old Redwood Highway/Mark West Springs Road Intersection
- Highway 101 Northbound Off-ramp at Mark West Springs Road
- Windsor Road Widening and Bridge Replacement Mitchell Lane to Reiman Lane
- Sonoma Mountain Homestead Private Road over 2 miles of roads in steep terrain at the end of Sobre Vista Road

### Land Development

- The Greens Subdivision, Windsor 360 lot multi-phase project, including on-site and off-site roadway improvements and adjacent creek flood control projects.
- Vintage Greens Subdivision, Windsor 450 lot multi-phase project, including on-site and off-site roadway improvements and adjacent creek flood control projects.
- Canyon Oaks Apartment Complex, Santa Rosa 96-unit apartment complex located on 10 acre in the Fountaingrove area of Santa Rosa. Onsite and offsite hillside improvements.



# **RICKARD T. SWINTH, P.E.**

### **Project Role**

Design Engineer

### Education

B.S., Civil Engineering, California Polytechnic State University, San Luis Obispo, 1994

### Registration

Professional Civil Engineer, CA No. 60906

### **Professional Endeavors**

Brelje & Race 2015 to Present

Enterra Associates, Inc. 2003 to 2015

Riechers, Spence & Associates 1999 to 2003

City of Petaluma, Engineering Department 1998 to 1999

Bartholow Engineering 1997 to-1998

Riechers, Spence & Associates 1994 to 1997

### **Professional Affiliations**

American Society of Civil Engineers

Rickard (Rick) Swinth has 22 years of experience in the civil engineering field. His experience has included the design, preparation of construction documents, and construction management of hospitality, commercial, residential and winery site developments. Additional areas of specialization include preparation of site and roadway improvement design, including grading, hydrology and hydraulic studies, and storm water management and treatment.

### **Plan Check / Peer Review**

 Grading and Drainage Plan Check, County of Sonoma Permit and Resource Management Department

### **Site Development**

### Kawana Academy of Arts and Science

• Elementary School Modernization and Additions

### **Oakmont Senior Living**

- Oakmont of Novato, Novato, CA
- Oakmont of Thousand Oaks, Thousand Oaks, CA
- Oakmont of Orange, Orange, CA
- Oakmont at Chapman, Orange, CA
- Oakmont at Evergreen, San Jose, CA

### **OPK Ranch, LLC**

• OPK Ranch Residence, St. Helena, CA

### Napa County Library

• Library Modernization and New Construction, Napa, CA

### Bell & Cameron LLC

Cameron Warehouse Site Improvement, Windsor, CA

### Additional Site Development Experience

### Commercial

- Silver Rose Inn, Calistoga, CA
- Windmill Inns, Napa, CA
- Brix Restaurant, Yountville, CA
- Demptos Napa Cooperage, Napa, CA
- Napa Valley Museum, Yountville, CA
- Napa National Bank, Napa, CA
- Pinot Blanc Restaurant, St. Helena, CA
- Santen Pharmaceutical, Napa, CA
- South Napa Marketplace, Napa, CA
- Sonoma Industrial Park, Sonoma, CA

### Residential

- Napa Yacht Club, Napa, CA
- Silverado Creek Tentative Map and Subdivision, Napa, CA
- Delco Cotati Tentative Map and Subdivision, Cotati, CA
- Bainbridge Subdivision, Sonoma, CA



# **RICKARD T. SWINTH, P.E.**

### Winery Design and Vineyard Development

- Cakebread Cellars, Rutherford, CA
- Crowley Vineyards, St. Helena, CA
- Folie a Deux Winery, Calistoga, CA
- Lone Oak Vineyards, American Canyon, CA
- Sherwin Vineyards, St. Helena, CA
- Cline Vineyards, Petaluma, CA
- Karren Vineyards, Petaluma, CA
- Kiger Vineyards, Santa Rosa, CA
- Michel-Schlumberger Winery, Healdsburg, CA
- Los Arroyos Vineyards, Sonoma, CA
- Anderson Vineyards, Kenwood, CA
- Cianciarulo Vineyards, Sonoma, CA
- Stein Vineyards, Glen Ellen, CA
- Bennett Valley Vineyards, Santa Rosa, CA
- Nicholas Vineyards, Sonoma, CA
- Ledson Vineyards, Sonoma, CA
- Artesa Vineyards, Annapolis, CA
- Pedroia Vineyards, Sebastopol, CA
- Perry Vineyards, Glen Ellen, CA
- Judge Vineyards, Santa Rosa, CA
- Hansen Vineyards, Occidental, Ca
- McSorley Vineyards, Sonoma, CA
- Chapman Vineyards, Sonoma, CA
- Chenoweth Vineyards, Occidental, CA
- Chenoweth Vineyards, Sebastopol, CA
- River Oaks Vineyards, Lodi, CA
- Martinelli Vineyards, Sebastopol, CA
- Martinelli Vineyards, Forestville, CA
- Martinelli Vineyards, Cazadero, CA
- Marcassin Vineyards, Cazadero, CA



# D03 Structural



### A PROPOSAL AGREEMENT FOR THE PROVISION OF PROFESSIONAL SERVICES

- DATE: January 6, 2017 Rev #1: January 9, 2017
- PROJECT NAME:Rohnert Park Fire Station No. 3LOCATION:Labath Avenue, Rohnert Park, CA
- CG PROJECT NO: LCA-110-17
- DESIGN FIRM: Crosby Group 155 Bovet Road, Suite 550 San Mateo, CA 94402
- CLIENT: LCA Architects 590 Ygnacio Valley Road, Suite 310 Walnut Creek, CA 94596

### GENERAL BUILDING

**DESCRIPTION:** The Fire Station No. 3 building will consist of a single, detached, one-story structure constructed of masonry and wood. The total building area is approximately 6,000 square feet and the anticipated construction budget is \$3,745,372. The structural design will be in accordance with the 2016 California Building Code.

- **SCOPE OF SERVICES:** Provide structural engineering services as outlined in Attachment B.
- **EXCLUSIONS:** See Attachment D.

### **FEE ARRANGEMENT**: Compensation for the scope of services outlined above will be as follows:

Schematic Design Design Development Construction Documents Bidding Phase Construction Administration Closeout	16% 20% 43% 2% 16% <u>2%</u>	= = = =	\$ 7,284 \$ 9,122 \$ 19,426 \$ 1,036 \$ 7,348 <u>\$ 744</u>
Closeout	<u>2%</u> 100%	-	<u>\$ 744</u> \$ 44,960

Total compensation shall be a lump sum of **\$44,960** (Forty Four Thousand Nine Hundred and Sixty Dollars).

**REIMBURSABLE EXPENSES**: Reimbursable expenses are in addition to the fees for basic services outlined above and include actual expenditures made in the interest of the project. Reimbursable expenses include, but are not limited to, messenger and delivery services, reproduction other than in-house prints,



		and travel beyond what is noted in the scope of work. Reimbursable expenses are separate from our fees and will be billed at cost.			
TERMS AND CONDITIONS:		This agreement includes the Terms and Conditions provided in Attachment A: Terms and Conditions.			
		proposal will expire within 60 days of the proposal date if not executed and ned to Crosby Group.			
AUTHORIZATION TO PROCEED: The undersigned hereby authorizes the services described herein and explicitly acknowledges the terms and conditions of this consulting agreement.					
	Upon review and acceptance of this proposal, please sign both copies and return one copy to Crosby Group.				
OFFERED BY:	D	Date	Patrick Crosby, S.E., Principal Printed Name / Title Crosby Group		
ACCEPTED BY:					
Signature		Date	Printed Name / Title LCA Architects		

Terms and Conditions and the initials required, see Attachment A, are a part of this Agreement



### ATTACHMENT A

**ROHNERT PARK FIRE STATION NO. 3** 

### TERMS AND CONDITIONS

Additional Services: Additional services will only be performed at the specific request and written authorization of the Client and will be charged at an hourly rate per Attachment C.

Access to Site: Unless otherwise stated, Crosby Group will have access to the site for activities necessary for the performance of the services. Crosby Group will take precaution to minimize damage due to these activities, but has not included in the fee the cost of restoration of any resulting damage.

**Dispute Resolution:** Any claims or disputes made during design, construction or post-construction between the Client and Crosby Group shall be submitted to non-binding mediation. The Client and Crosby Group agree to include a similar mediation agreement with all contractors, subcontractors, sub-consultants, suppliers and fabricators, thereby providing for mediation as the primary method for dispute resolution between all parties.

**Billings/Payments:** Invoices for Crosby Group's services shall be submitted, at Crosby Group's option, either upon completion of such services or on a monthly basis. Invoices shall be payable within 30 days after the invoice date. If the invoice is not paid within 30 days, Crosby Group may, without waiving any claim or right against the Client, and without liability whatsoever to the Client, terminate the performance of the service.

**Late Payments:** Any accounts unpaid 60 days after the invoice date may be subject to a monthly service charge of 1.5% on the then unpaid balance. In the event any portion or all of an account remains unpaid 90 days after billing, the Client shall pay all costs of collection, including reasonable attorney's fees.

**Indemnification:** The Client shall, to the fullest extent permitted by law, indemnify and hold harmless Crosby Group, his or her officers, directors, employees, agents and sub-consultants from and against all damage, liability and cost, including reasonable attorney's fees and defense costs, arising out of or in any way connected with the performance by any of the parties named of the services under this agreement, excepting only those damages, liabilities or costs attributable to the sole negligence or willful misconduct of Crosby Group.

**Certifications:** Guarantees and Warranties: Crosby Group shall not be required to execute any document that would result in its certifying, guaranteeing or warranting the existence of conditions whose existence Crosby Group cannot ascertain.

Limitation of Liability: In recognition of the relative risks, rewards and benefits of the project to both the Client and Crosby Group, the risks have been allocated such that the Client agrees that, to the fullest extent permitted by law, and not withstanding any other provision of this Agreement, Crosby Group's total liability, in the aggregate of the Consultant and the Consultant's officers, directors, partners, employees and subconsultants, and any of them, to the Client and anyone claiming by or through the Client, for any and all claims, losses, costs and damages, including attorney's fees and costs and expert witness fees and costs of any nature whatsoever or claims expenses resulting from or in any way related to the Project or Agreement from any cause or causes shall not exceed the total compensation received by the Consultant under this Agreement. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

**Termination of Services:** This agreement may be terminated by the Client or Crosby Group should the other fail to perform its obligations hereunder. In the event of termination, the Client shall pay Crosby Group for all services rendered to the date of termination, all reimbursable expenses, and reimbursable termination expenses.

**Ownership of Documents:** All documents produced by Crosby Group under this agreement shall remain the property of Crosby and may not be used by the Client for any other endeavor without the written consent of Crosby Group.

Initial Here:	(Crosby Group)	(Client)

San Francisco Sacramento www.crosbygroup.com Durango Washington DC



### ATTACHMENT B

### **ROHNERT PARK FIRE STATION NO. 3**

### **BASIC STRUCTURAL ENGINEERING SERVICES**

Basic Services include the analysis, design, detailing, specification, review of structural submittals, and periodic observation of construction of the primary structural system. Basic Services are considered the typical scope of services for which the Structural Engineer of Record is normally responsible. Other Additional Services may be added to the Consultant's Basic Scope by mutual agreement with the Prime Design Professional as outlined in Attachment D.

### SCHEMATIC DESIGN PHASE (16%)

- Study and advise on selection of systems and materials suitable to the project.
- Attend preliminary meeting with the Client and the design team.
- Assist in establishing structural criteria for Geotechnical Consultant and other consultants as needed.
- Develop alternative structural schemes.
- Review cost estimator's schematic probable construction costs.
- Provide schematic design drawings and/or sketches.

### **DESIGN DEVELOPMENT PHASE (20%)**

- Develop the design of the selected structural system.
- Provide progress drawings defining major framing sizes and key details of the primary structural system.
- Provide structural specification titles for inclusion in the Project Specification Table of Contents.
- Consult with the Client on secondary structural elements.
- Provide input for and review of preliminary construction cost estimates.

### **CONSTRUCTION DOCUMENT PHASE (43%)**

- Prepare final structural calculations.
- Prepare final structural drawings sufficiently detailed for competitive bidding and proper construction of the primary structural system.

- Review the effects of elements not designed by the Engineer on the primary structural system.
- Provide (or edit) structural specification sections and assist in coordinating structural requirements shown in other specification sections.
- Provide input for the inspection and testing requirements for all structural materials and workmanship.
- Provide input for the preparation and review of final construction cost estimates.

### BIDDING PHASE (2%)

• Provide structural addenda and structural clarifications, as required.

### **CONSTRUCTION PHASE (16%)**

- Review structural shop drawings, submittals and RFI's, submitted through and checked by the General Building Contractor, for general compliance with the intent and requirements of the structural portion of the Contract Documents.
- Review laboratory test reports for structural items detailed on the structural drawings or called out in the structural specifications. Take necessary action on reports indicating non-conforming items.
- Conduct four site visits to observe field conditions and conformance with the Contract Documents.

### CLOSEOUT (2%)

Assist Contractor in providing as-built docs

San Francisco Sacramento www.crosbygroup.com Durango



### ATTACHMENT C

**ROHNERT PARK FIRE STATION NO. 3** 

# PROFESSIONAL SERVICES RATE SCHEDULE

2017

Principal-in-Charge \$280.00 per hour **Project Manager** \$190.00 per hour \$180.00 per hour Senior Structural Engineer Structural Engineer \$168.00 per hour Senior Project Engineer \$164.00 per hour **Project Engineer** \$159.00 per hour Structural Designer \$148.00 per hour **BIM Manager** \$162.00 per hour **BIM Designer** \$139.00 per hour Clerical \$72.00 per hour

\* All Professional Services Rates are subject to review and renegotiation at the end of the calendar year listed above.

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Durango Washington DC



## ATTACHMENT D

### **ROHNERT PARK FIRE STATION NO. 3**

### ADDITIONAL SERVICES / EXCLUSIONS

OF	PTIONAL ADDITIONAL SERVICES	Included	NIC	Remarks
1.	Provide Comparative Studies of Prospective Sites		✓	
2.	Investigate Existing Conditions		$\checkmark$	
3.	Prepare Testing Program to Evaluate Existing		√	
4	Material Properties		✓	
4.	Prepare As-Built Conditions			
5.	Provide Detailed Estimates of Construction Cost		✓ ✓	
6.	Provide Detailed Quantity Surveys or Inventories of Material and Labor			
7.	Prepare Record Drawings		$\checkmark$	
8.	Provide Services Related to Non-Structural or Secondary Structural Elements and Their Attachments, such as:			
	a. Exterior Building Skin/Cladding System		✓	Embed and Attachment Details Only.
	b. Interior Architectural Systems		✓	Review of Details Drawn by Architect.
	<ul> <li>Roof Top Supports for Window Washing Systems and Tie Downs</li> </ul>		✓	
	d. Design of Mechanical Screens		✓	
	e. Anchorage of Mechanical, Electrical or Plumbing Equipment		$\checkmark$	Details to be Drawn by MPE Consultants.
	f. Anchorage of Mechanical, Electrical or Plumbing Distribution Systems		√	
	g. Anchorage of Medical Equipment and Components		✓	Details to be Drawn by Architect.
	h. Anchorage of Owner-Furnished Equipment.		$\checkmark$	
	<ul> <li>Anchorage of Equipment that is substituted at Contractor's or Owner's Request after Approval by Reviewing Agency.</li> </ul>		~	
	j. Storage Tanks or Underground Vaults	~		Emergency Generator / Fuel Tank Anchorage Review
	k. Mechanisms or Guide Systems for Elevators, Escalators or other Conveying Systems.		√	Rail Supports and Attachments Only.
	I. Stairs (designed by others).		✓	Embed and Attachment Details Only.
	m. Design of Support for Antenna		✓	
9.	Provide Services Related to Sitework Elements			1
	a. Free-Standing Site Walls and Retaining Walls		✓	
<u> </u>	b. Landscape Elements		✓	



	c. Flagpoles or Lightpoles		✓	
	d. Building Signage		✓	
	e. Culverts or Bridges		✓	
	f. Miscellaneous Site Structures	✓		Emergency Generator & Fuel Tank Pads / Canopy Structure
10.	Provide Non-Linear Dynamic Seismic Analysis		✓	
11.	Provide Analysis of Floor Response to Foot-fall or Vibratory Equipment.		<b>√</b>	
	Provide Analysis for Rooftop of Ground-Mounted Photovoltaic Systems.		✓	
13.	Special Wind Analysis		$\checkmark$	
14.	Seismic Risk Analysis		✓	
15.	Respond to, or Incorporate Peer Review Comments.		<b>√</b>	
16.	Prepare Demolition Documents		✓	
17.	Prepare Excavation, Shoring, or Underpinning Documents.		~	
18.	Provide Feasibility Studies Regarding the Use of Energy Dissipation Systems.		~	
19.	Provide Services for Construction Phasing or Sequencing.		~	
20.	Provide Services for Field Modifications or Substitutions Originated by Contractor or Owner.		~	
21.	Redesign Required Due to Construction Cost Exceeding the Construction Estimate.		~	
22.	Redesign or Investigation of Alternative Details or Methods of Construction Requested after 100% Construction Documents have been Completed.		✓	
23.	Significant Redesign of Structural System after the 100% Design Development Documents have been Completed.		~	
ITE	MS EXCLUDED FROM BASIC SERVICES			
1.	Design, Detailing or Specifying of Waterproofing.		✓	
2.	Soils Investigations or Reports.		✓	
3.	Surveying.		✓	
4.	Material Testing.		✓	
5.	Continuous Job Inspection or Special Inspection as Required by Section 1701.5 of the Building Code.		~	



Structural Engineering and Design

Building a successful business by combining science and art to deliver exceptional and creative design solutions for our clients

# FACT SHEET



# Crosby Group is an award-winning innovator in structural engineering and advanced seismic solutions – we go beyond convention to offer creative alternatives to design challenges. Our comprehensive design services include new/renovation design, seismic evaluation/retrofit, constructability/peer review, BIM modeling and LEED partnering to both public and private clients. We have collaborated on over \$4 Billion worth of design-build construction work, making us a leader in this project delivery method. Established in 1992, Crosby Group has experience in education, healthcare, mission-critical, justice, industrial, commercial, laboratory, and correctional sectors. We have worked on projects across the United States, and the Middle East, Asia, Europe and South America.

As a promoter of innovation, we continually challenge the structural engineering community to improve. Our focus on our clients' priorities along with our staff's reputation for creative solutions ensures the success of our projects. Our primary goal is to establish continued, long-term relationships with our clients. We accomplish this goal through our commitment to excellence and service for our clients, and development of professionalism and growth for our staff.

### **DESIGN PORTFOLIO:**

- K-12 / Higher Education, DSA
- Commercial
- Courts & Justice
- Mission-Critical
- Laboratories
- Hospitality and Recreational
- Mixed Retail/Housing
- Community & Convention Centers
- Healthcare, OSHPD
- Adult & Juvenile Correctional
- Essential Services
- Industrial / Manufacturing
- Aviation
- Transportation
- Historic Structures
- Parking Structures
- Tenant Improvements
- Photovoltaic (PV) Installations
- MEP Equipment Anchorage & Bracing
- Local Municipal & Civic
- State & Federal Government
- International

### **PROFESSIONAL SERVICES:**

- Design Consultant
- Design / Build Services
- Peer Review
- Constructability Reviews
- Structural and Seismic Evaluations
- Anti-Terrorism/Force Protection Design (ATFP)
- Feasibility and Usability Studies
- LEED Collaboration
- BIM/Revit Modeling
- Pre-Design Services
- Project Management

### **CERTIFICATIONS:**

- MBE Certified, California Public Utilities Commission #7DN00025
- MBE Certified, California Department of Transportation #20019
- SBE Certified, State of California Department of General Services #6025

### HEADQUARTERS:

Crosby Group 155 Bovet Road Suite 550 San Mateo, CA 94402 (650) 367-8100

### ADDITIONAL OFFICES:

Sacramento Office: 3444 Marconi Avenue Sacramento, CA 95821 (916) 563-7600

Colorado Office: 725 East College Drive Suite B Durango, CO 81301 (970) 375-2515

Washington D.C. Office: 300 New Jersey Street NW Washington D.C. 20001 (202) 289-5600



## SERVICES - PORTFOLIO - MISSION

Crosby Group, as a promoter of innovation, continually challenges the structural engineering community to improve. Our focus on our clients' priorities along with our staff's reputation for creative solutions ensures the success of your project.

### Our Services, Strengths and Specialties:

- Structural Design for New and Renovation Construction
  - Clients in both Public and Private sectors
  - BIM Capable
  - LEED Accredited Professionals
- Seismic and other Structural Evaluation of Existing Structures.
  - Assessment of Present Conditions through Research, Modeling and Testing.
  - Natural Hazard Mitigation experts in Seismic, Hurricane and Coastal Flooding Resistant Construction.
- Design-Build Services
  - Over \$4 Billion Completed Construction since 1989
- Pre-Construction Services
  - Perform as Prime on Structural Contracts
  - Feasibility and Usability Studies
- Value Engineering and Constructability Reviews

Crosby Group, based in Northern California since 1992, has offices in San Mateo, Sacramento, Colorado and Washington DC, as well as alliances abroad. Our team of 20+ has the depth and experience required for multiple, complex projects.

### Our Portfolio:

- Federal Facilities USACE, FBOP, US State Department
- State, County and Municipal Facilities
- Commercial, Urban and Residential Developments
- Critical Facilities / Correctional Facilities
- Medical and Laboratory Facilities OSHPD Compliant
- Higher Education and K-12 Educational Facilities
- Industrial / Manufacturing Complexes and Parking Structures
- Convention Centers, Hotels and Recreational Facilities
- Seismic and Natural Hazard Design / Rehabilitation

Crosby Group's primary goal is to establish continued and long-term relationships with our clients. We accomplish this goal through our commitment to excellence and service for our clients, and development of professionalism and growth for our staff.

### **Our Mission Statement:**

Building a successful business, by combining science and art to deliver exceptional and creative design solutions for our clients.

For more information on our MBE/SBE certifications and direct contact information, please visit our website.



# Patrick Crosby, S.E., LEED AP, DBIA

### Principal-in-Charge

Patrick Crosby established the Crosby Group in 1992 and serves as President and Managing Principal. An innovator in the field of structural engineering, he stays abreast of structural and seismic design solutions from around the world and has introduced several of these cutting edge technologies to projects in the U.S., the application of these technologies has resulted in safer buildings at a reduced cost to our valued clients.

Patrick is also fully knowledgeable of applicable codes and government requirements for both conventional and performance based design of essential services facilities. These codes include the California Building Code (CBC) and IBC, ASCE 7--Minimum Design Loads for Buildings and Other Structures, and material specific design codes. He has extensive experience in the design of essential service buildings including fire stations, police stations and emergency operations centers and understands the critical performance requirements these facilities must meet. His essential services experience includes:

### **PROJECT EXPERIENCE:**

- Vacaville Fire Station #75 Bridging Documents, Vacaville, CA Provided structural design bridging documents for a new 9,000sf one-story fire station with dorm rooms, offices, a dayroom, kitchen, exercise room, and 3-bay garage including DD documents and cost estimate for the D/B RFP, and review the D/B Contractor's CD documents for conformance to the bridging documents. *Cost:* \$5.4M.
- Fremont Fire Station #8, Fremont, CA Provided structural engineering design for a new 10,086sf three-bay fire station housing one engine company including room for expansion. *Cost:* \$4.7M.
- Atwater Fire Station No. 2/Police Detective Substation & EOC Facility, Atwater, CA Provided structural engineering design for a new 7,700sf two-bay fire station, police detective substation and Emergency Operation Center including dorms, a dining room, kitchen, laundry, exercise room, day room and offices. Cost: \$2.6M.
- Berkeley Hills Fire Station #7, Berkeley, CA Provided structural engineering design for a new 8,700sf fire station housing two-apparatus bays and includes dorm rooms, a dining room, kitchen, exercise room, laundry, dayroom and offices. *Cost:* \$3.1M.
- American Canyon Police and Fire Facility, American Canyon, CA Provided structural engineering design for a new 21,694sf facility including the Fire Department building with apparatus bays and storage, and the Police Department building. *Cost:* \$8.6M.
- Newark Fire Station #1 & Emergency Operations Center, Newark, CA Provided structural design for a new 18,000sf Fire Station and EOC facility. The two-story building includes 3 apparatus bays along with a lobby, meeting rooms, offices, a library, sleeping rooms, lockers, kitchen, dining room, day room, and a roof garden. *Cost: \$8M.*

Merced Fire Station #55, Merced, CA Provided complete structural engineering design services for the new Merced Fire Station #55 for the City of Merced. The new one-story, 6,200sf facility includes two apparatus bays and includes dorm rooms, a dining room, kitchen, laundry/storage, exercise room, day room, community room and offices. Cost: \$2.5M.

### EDUCATION:

B.S., Civil Engineering, University of Santa Clara, 1979

Graduate work at U.C. Berkeley and San Jose State University

### **REGISTRATIONS:**

1982 California / Civil Engineering / # C34519

1986 California / Structural Engineering / # 2770

2002 Colorado / Structural Engineering / #36830

2002 Nevada / Structural Engineering / #15305

2005 Washington / Structural Engineering / #41732

2008 Arizona / Structural Engineering / #48068

2010 Idaho / Professional Engineer / #2578

### AFFILIATIONS:

Structural Engineers Association of Northern California

Member, AB3010 Task Force evaluating State DSA procedures

2012-2015 Board of Directors Design Build Institute of America

2015 Board of Directors International Partnering Institute

American Institute of Steel Construction, Inc.

Engineering Earthquake Research Institute

American Society of Civil Engineers



## J. Luis Ortega, P.E.

### **Senior Project Manager**

Luis Ortega is an Associate and serves as Senior Project Manager. He has 25 years of experience including the design and construction of essential services facilities including numerous fire stations across California. He is familiar with the particular design requirements of fire station design and brings that knowledge to each of these projects. He has been involved in the design of new fire stations, renovation and retrofit of existing fire stations, as well bridging documents for design/build fire stations. He is familiar with the specific design requirements for fire stations in the California Building Code and with his extensive experience can quickly and efficiently address fire station design issues. His fire station design experience includes:

### **RELEVANT EXPERIENCE:**

- Vacaville Fire Station #75 Bridging Documents, Vacaville, CA *Project Manager Cost: \$5.4M Completion: 2016*  Provided structural design for the development of DD bridging documents for a new 9,000sf three-bay fire station, as well as review of the D/B team's design for compliance.
- Fremont Fire Station #8, Fremont, CA *Project Manager Cost: \$4.7M Completion: 2008*  Provided structural design for a new 10,086sf three-bay fire station housing one engine company including room for expansion.
- Marshall Park Fire Station/Police and Parks & Recreation, Modesto, CA *Project Manager Cost:* \$3.6M Completion: 2008

   Provided structural design for a new 11,200sf facility dividing into two wings, one housing the 7,750sf fire station and the other the 3,450sf police and parks & rec. dept.
- Atwater Fire Station No. 2/Police Detective Substation & EOC Facility, Atwater, CA Project Manager Cost: \$2.6M Completion: 2007 Provided structural design for a new 7,700sf two-bay fire station, police detective substation and Emergency Operation Center facility. The facility includes dorm rooms, a dining room, kitchen, laundry/storage, exercise room, day room and offices.
- American Canyon Police and Fire Facility, American Canyon, CA Project Manager Cost: \$8.6M Completion: 2007 Provided structural design for a new 21,694sf facility including the Fire Department building with apparatus bays and storage, and the Police Department building.
- Newark Fire Station #1 & Emergency Operations Center, Newark, CA Project Manager Cost: \$8M Completion: 2005 Provided structural design for a new 18,000sf facility Fire Station and EOC facility. The two-story building includes 3 apparatus bays along with a lobby, meeting rooms, offices, a library, sleeping rooms, lockers, kitchen, dining room, day room, and a roof garden.
- Fremont Fire Station #6, Fremont, CA
   Project Manager Cost: \$5M Completion: 2005
   Provided structural design for a new 13,000sf four apparatus bay fire station housing one engine company, one truck company and a battalion commander.

### EDUCATION:

Architectural Engineering, California Polytechnic State University, 1989

### **REGISTRATIONS:**

1991 California / Civil Engineering / #C57534

### **AFFILIATIONS:**

Structural Engineers Association of Northern California (SEAONC)

International Code Committee (ICC)

State of California Safety Assessment Program Disaster Service Worker Volunteer SAP #10386

# VACAVILLE SOUTHTOWN FIRE STATION NO. 25 BRIDGING DOCUMENTS



Crosby Group provided structural engineering design to assist the City of Vallejo in developing bridging documents for the design-build of a new 9,000sf, threebay Fire Station for the Southtown development area. The new facility houses dormitories, exercise room, offices, lobby, day room, decontamination room, locker room, kitchen, laundry, and storage. The site structural elements include an enclosure and pad for an emergency generator, a covered trash enclosure, and a fuel tank pad. Services included developing a schematic conceptual design, producing a design development level set of documents (including structural drawings, specifications, and basis of design) for the design-build contract, and review of the design-build team's proposed design for conformance to the requirements of the bridging documents.



### LOCATION: Vacaville, California

CONSTRUCTION COST: \$5.4 Million

# COMPLETION: 2016

### **CLIENT REFERENCE:**

Carl Campos, CEO LCA Architects (925) 944-1626

- Essential Services
- Design-Build
- Three Apparatus Bays

# **FREMONT FIRE STATION #6**



Crosby Group provided structural engineering for the design of this new 13,000sf Fire Station for the City of Fremont. The Fremont Fire Station #6 is equipped with four apparatus bays and houses one engine company (three personnel), one truck company (three personnel) and one battalion commander. The apparatus bay structure is made up of concrete masonry units with a metal deck over steel beam supports. The main ridge is supported using a tube steel

truss. Reserve apparatus is stored in a separate building approximately 2,400 square feet in size. The structure is a combination of one and two story living areas designed using steel brace frames with wood infill. The entire structure rests on a mat slab foundation.





LOCATION: Fremont, California

CONSTRUCTION COST: \$5 Million

COMPLETION: 2005

CLIENT REFERENCE: Bill Louie, AIA WLC Architects (916) 355-9922

- Essential Facility
- Four Apparatus Bays







# **FREMONT FIRE STATION #8**

Crosby group

Crosby Group provided structural engineering for the design of this new 10,086sf three-bay Fire Station for the City of Fremont. The facility houses one engine company, with room for expansion, as well as reserve apparatus within the three bays. The fire station design consists of a 3- bay wide Apparatus Room, public lobby, internal staff work areas, and living quarters. Construction materials are concrete block masonry apparatus bay, wood framed walls, metal plate roof trusses, and concrete floor slab on grade.





LOCATION: Fremont, California

CONSTRUCTION COST: \$4.7 Million

COMPLETION: 2008

### CLIENT REFERENCE:

Bill Louie, AIA WLC Architects (916) 355-9922

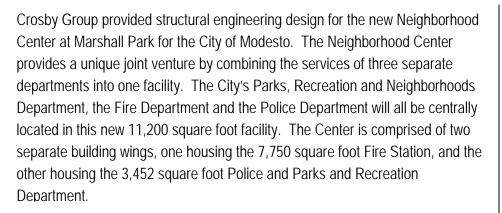
- Essential Facility
- 3 Apparatus Bays







# NEIGHBORHOOD CENTER AT MARSHALL PARK FIRE STATION/POLICE AND PARKS & RECREATION







LOCATION: Modesto, California

CONSTRUCTION COST: \$3.6 Million

COMPLETION: 2008

CLIENT REFERENCE: Max Medina, AIA WLC Architects (916) 355-9922

**PROJECT HIGHLIGHTS:**Essential Facility



# ATWATER FIRE STATION NO. 42 / POLICE DETECTIVE SUBSTATION & EOC FACILITY

Crosby Group provided complete structural engineering design for the new Atwater Fire Station No. 42/Police Detective Substation & EOC Facility for the City of Atwater.

This 7,700 square foot facility houses Atwater's new Fire Station #42, providing two apparatus bays, a police detective substation to process offenders, and an Emergency Operations Command facility, all combined under one roof. The Fire Station provides the necessary program spaces including dorm rooms, a dining room, kitchen, laundry/storage, exercise room, day room and offices. This one-story wood framed building utilized pre-engineered roof trusses as an efficient means of framing out the large open spaces required at the apparatus bays.







LOCATION: Atwater, California

CONSTRUCTION COST: \$2.6 Million

COMPLETION: 2007

CLIENT REFERENCE: Bill Louie, AIA WLC Architects (916) 355-9922

- Essential Facility
- Two Apparatus Bays
- Long Span Trusses







# **BERKELEY HILLS FIRE STATION #7**

Crosby Group provided complete structural engineering design services for this new 8,700 square foot fire station for the City of Berkeley. The new Berkeley Hills Fire Station #7 is a multi-company station located on a main thoroughfare in the Berkeley Hills, and replaces the outdated facility built in 1939. Jointly staffed by both the Berkeley Fire Department and East Bay Regional Park District, it houses two apparatus bays and includes dorm rooms, a dining room, kitchen, laundry/storage, exercise room, day room, reading room and offices. This two-story wood and concrete framed building utilized a variety of building materials to achieve the desired aesthetic and functionality required of a fire station. The Hills Fire Station is also supplied with full backup power from an onsite generator.

The Berkeley Hills Fire Station No. 7 has the distinction of being the City's first U.S. Green Building LEED-certified building, which was accomplished by the incorporation of recycled products into construction materials, as well as providing energy efficient HVAC systems, diversion of more than 75% of construction waste from landfills, and low water consumption fixtures.





LOCATION: Berkeley, California

CONSTRUCTION COST: \$3.1 Million

# COMPLETION: 2006

### CLIENT REFERENCE:

Marcy Wong, AIA Marcy Wong Donn Logan Architects (510) 843-0916

- Essential Facility
- LEED Certified
- 2007 Berkeley Design Advocates Design Award



# **AMERICAN CANYON POLICE & FIRE FACILITY**



Crosby Group provided structural design of this 21,694 SF facility made up of the Main Building with Fire Department Building and apparatus bays, and Police Department Building. The Facility also included a Fire Storage Building, a Police Storage Building, a carport cover, CMU walls, and small retaining walls.





LOCATION: American Canyon, California

CONSTRUCTION COST: \$8.6 Million

COMPLETION: 2007

CLIENT REFERENCE: Bill Louie, AIA WLC Architects (916) 355-9922

- Essential Facility
- Dual Apparatus Bays

# **MERCED FIRE STATION #55**



Crosby Group provided complete structural engineering design services for this new 6,200 square foot fire station for the City of Merced. The Merced Fire Station #55 houses two apparatus bays and includes dorm rooms, a dining room, kitchen, laundry/storage, exercise room, day room, community room and offices. This one-story wood framed building utilized pre-engineered roof trusses as an efficient means of framing out the large open spaces required at the apparatus bays.



### LOCATION: Merced, California

CONSTRUCTION COST: \$2.5 Million

COMPLETION: 2006

### CLIENT REFERENCE:

Bill Louie, AIA WLC Architects (916) 355-9922

- Essential Facility
- Two Apparatus Bays
- Long Span Trusses







# NEWARK FIRE STATION #1 & EMERGENCY OPERATIONS CENTER

Crosby Group provided complete structural engineering for this new 18,000 square foot Fire Station and Emergency Operations Center. The facility includes 3 apparatus bays along with a lobby, meeting rooms, offices, hazardous materials storage, EMS room, a library, sleeping rooms, lockers, kitchen, dining room, day room, and a roof garden. The two-story building was constructed with concrete masonry block walls, concrete wall, and concrete over metal deck floors. This project demanded a particularly sensitive approach to preserving prominent urban and historical ideals of the location.







LOCATION: Newark, California

CONSTRUCTION COST: \$8 Million

# COMPLETION: 2005

### CLIENT REFERENCE: Marcy Wong, AIA, Principal MWDL Architects

MWDL Architects (510) 843-0916

- Essential Facility
- 3 Apparatus Bays







# LIVERMORE FIRE STATION #7

Crosby group

Crosby Group provided complete structural engineering design services for this new 10,000 square foot new Fire Station for the Livermore-Pleasanton Fire Department. The Crosby Group used creative engineering solutions to accommodate for large skylights and a fast-track construction schedule. The solution assured that firefighters were able to move into their new facility quickly after living in a temporary facility.





LOCATION: Livermore, California

CONSTRUCTION COST: \$2.6 Million

COMPLETION: 2002

### CLIENT REFERENCE:

Kirk Van Cleave, AIA RRM Design Group (209) 847-1794

- Essential Facility
- Large Skylights

# **DISCOVERY BAY FIRE STATION #59**

Crosby Group provided complete structural engineering for the new 6,900 square foot, 3-truck Fire Station #59 serving Discovery Bay, California. The basis for this design was a prototype firehouse completed by the East Contra Costa County Fire Protection District, along with input from the Firehouse personnel. This is a fully functional facility providing bedrooms, lockers, laundry and kitchen facilities. It also serves as an emergency evacuation center for the community, complete with backup emergency generator and secondary backup for radio power.





LOCATION: Discovery Bay, California

CONSTRUCTION COST: \$1.3 Million

# COMPLETION: 2002

### **CLIENT REFERENCE:**

Gregg Capper, General Manager Lichau & Associates Architects (503) 885-7178

- Essential Facility
- 3 Apparatus Bays

# D04 MEP



www.fard.com Consulting Engineers,Electrical/Mechanical

**San Francisco** San Diego San Francisco Office: 309 Lennon Lane Suite 200 Walnut Creek, CA 94598 (925) 932-5505 Fax (925) 932-0555 mailbox@fard.com

> H.T. (Sean) Fard, EE Max E. Saiidnia, ME William Tang, ME Arthur W. Quaster (Senior Associate)

December 19, 2016

Brent Randall LCA Architects 590 Ygnacio Valley Road, Suite 310 Walnut Creek, CA 94596 T (925) 944-1626 F (925) 944-1666

Re: Fire Station No. 3, Rohnert Park

Dear Brent:

Fard Engineers, Inc. is pleased to submit the following mechanical/electrical design services proposal for the above referenced project, based on information you provided in your RFP email dated December 14, 2016.

- A. <u>Project Description</u> This project is for a new 6,000 sq. ft. fire station in Rohnert Park. Includes Dorm and Locker Area, Day Room/Kitchen/Dining Area, Decontamination Room and Shower, Extractor/Dryer area, Storage areas, Maintenance Shop, Defensive Tactics area, Office areas, Exercise Room, Communications area, Weapons Storage, Lobby, Server Rooms, Restrooms, Laundry, Apparatus Bay, Turnout Gear area, Breathing Air fill station, EMS Supplies area.
- **B.** <u>Scope</u>: MEP Scope consistent with scope outlined in Public Safety Final Document dated September 14, 2016 and shown in Fire Station Option 2B.3 Conceptual Design dated December 13, 2016.
  - 1. Electrical:
    - a. Design of lighting (including site lighting), power distribution, and Title 24 calculation for lighting.
    - b. Provide design build drawings and specifications for telephone and cable TV, including device locations, raceway infrastructure and riser diagrams.
    - c. Provide design build specifications for fire alarm.
    - d. WiFi, DAS, A/V and PA system design by others.
    - e. Design of Emergency Generator for UPS
  - 2. **Mechanical:** Design of heating, ventilation and air conditioning systems. Title 24 calculations for mechanical equipment.
  - 3. **Plumbing:** Design of interior gas, water, hot water and sewer systems out to 5 feet beyond building (civil engineer to provide outside plumbing utilities). Provide connection stub-out for future training facilities.
  - 4. Title 24 calculations for building envelope.
  - 5. **Fire Protection:** Prepare performance specifications for automatic fire sprinkler system. Review shop drawings prepared by design/built contractor.

- 6. **Coordinate Meetings:** Coordinate meetings with owner and architect during the design process. Review and respond to possible city and/or county comments.
- 7. Value Engineering: Review value engineering items, if available by the owner's contractor, for incorporation into construction document, provided that the comments are received no later than 50% submittal level.
- 8. **LEED Analysis & Compliance:** MEP related LEED analysis will be provided if requested, fee is listed under "optional services".
- 9. **Construction Review:** Review of contractor's material submittals and respond to RFI. Two (2) site visits during construction will be provided (construction review does not include responsibility for the means and method used by the contractor or his failure to comply with the construction documents). Any additional site visits during construction will be provided, if required by owner, and any additional work will be charged on an hourly basis.

Note: We assume that utility joint trench and site utility coordination is provided by utility consultant.

### C. <u>Compensation</u>

1. Design Fee

		Electrical	HVAC	Plumbing	Total
	Schematic Design	\$2,700.00	\$2,700.00	\$2,700.00	\$8,100.00
	Design Development	\$3,650.00	\$3,650.00	\$3,650.00	\$10,950.00
50%	Construction Development	\$5,450.00	\$5,450.00	\$5,450.00	\$16,350.00
90%	Construction Development	\$3,650.00	\$3,650.00	\$3,650.00	\$10,950.00
	Permits and Bidding	\$1,000.00	\$1,000.00	\$1,000.00	\$3,000.00
C	Construction Review Services	\$1,800.00	\$1,800.00	\$1,800.00	\$5,400.00
	Total	\$18,250.00	\$18,250.00	\$18,250.00	\$54,750.00

2. Optional Services - Please check items below if optional services is to be included.

Site Lighting Photometric Plans	\$ 4,200.00	
Fire Protection Performance Specification	\$ 4,500.00	¢50 250 00
LEED Analysis & Compliance	\$ 5,500.00	\$59,250.00
Building Envelope Title 24 Calcs.	\$ 5,500.00	

- 3. Invoice will be issued monthly on the basis of work performed and payment is due within forty-five (45) days of invoice date. Service charge of 1.5% will be added monthly to all overdue invoices.
- D. <u>Reimbursable</u> Plot/prints made for permit set, client use or bid set should be reimbursable at the cost.
- E. <u>CAD File/Email</u> Architectural files which are sent electronically should be purged from layers and blocks which are not commonly used as background. MEP drawings will be prepared in 2 dimensional AutoCAD.
- **F.** Liability of CONSULTANT and of CONSULTANT'S employees and SUB-CONSULTANTS, to OWNER, shall not exceed an aggregate limit of \$1,000,000.00, regardless of the legal theory under which such liability is imposed. Consultant shall not be liable and shall be indemnified against any claim regarding presence of or construction work related to hazardous material or toxic mold.

Upon review and acceptance, please return signed proposal to my attention. Fard Engineers, Inc. is prepared to provide quality engineering design services and look forward to working with you.

Very truly yours,

#### ACCEPTED AND APPROVED

FARD ENGINEERS, INC.	
	1
Ma Xouda	ige to 1
Max Saiidnia, P.E.	(Re)

MS: kv

|--|

Title:\_\_\_\_\_

Company:\_\_\_\_\_

Date:		



EDUCATION Bachelor of Science of Mechanical Engineering University of Missouri, Columbia, Missouri, 1979

#### REGISTRATION

Mechanical Engineer, M26886, California and Colorado

#### MEMBERSHIPS

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

American Society of Plumbing Engineers (ASPE)

National Fire Protection Association (NFPA)

International Code Council (ICC)

#### PRIOR EXPERIENCE

<u>1979-1988</u> Mechanical Engineer at 3 Consulting Engineering Firms

<u>1988-1990</u> Chief Mechanical Engineer, Bentley Engineering, San Francisco, California

<u>1990-Present</u> President & Chief Mechanical Engineer, Fard Engineers Inc., Walnut Creek, California

#### EXPERIENCE

Max is a Mechanical Engineer with over 35 years of experience in design and construction of HVAC, Plumbing, and Fire Protection for Multi Residential, Public, Commercial, Light industrial, Institutional, and Educational Facilities. Max has a practical hands-on approach to design that has enabled him to optimize in dealing with construction project issues and is well known in the industry for his practical and cost effective approaches in HVAC and plumbing solutions.

#### **Relevant Experience:**

- Fire Station #24, San Mateo, CA. New 6,000 sq. ft. (2011-2012)
- Fire Station #53, Brentwood, CA New 7,000 sq. ft.
- Fire Station 82, Brentwood, CA, (2007 to 2009)
- Fire Stations No. 92 and 96, Tracy. New construction of two fire stations, approximately 7,000 sq. ft (2009-Present)
- Fire Station #85, Pittsburg, CA. New 5,800 sq. ft. fire station. (2002 to 2006)
- Fire Station #66, Richmond,CA. New construction of fire station, approximate area 6,200 sq. ft. (2008)
- Camp Park Fire Station, Dublin, CA. New 8,000 sq. ft. fire station. (2007)
- Fire Station 34, San Ramon. 500 sq. ft. modification of toilet and kitchen area. 800 sq. ft. addition for new kitchen and exercise room (2001 to 2003)
- Fire Station 35, San Ramon, CA. Addition of approximately 700 sq. ft. exercise room. (2001 to 2003)
- Fire Station #83, Antioch, CA. Remodel and addition of new dorm rooms in existing fire station (2007 to 2008)

#### **Assemblies & Public**

- Murphy Canyon Community Centers:
  - Orleck Heights, 10,000 sq. ft. Clubhouse, San Diego, CA (2004-2006)
  - Canyon View North, 2,000 sf Clubhouse, San Diego, CA (2004-2006)
  - Aero Ridge Club House, 2,000 sq. ft., San Diego, CA (2004-2006)
  - Youth Center, 1,200 sq. ft., San Diego, CA
  - Santo Terrace, 10,000 sq. ft. Clubhouse, San Diego, CA (2004-2006)
- OMC Recreation Center, 17,500 sq. ft., Monterey, CA (2008)
- Navy Housing Cabrillo Clubhouse, San Diego, CA(2001-05)
- Monterey La Mesa Recreation Center, 26,000 sf (2005-07



#### **EDUCATION**

Bachelor of Science in Electrical Engineering San Francisco State University, CA 1989

#### REGISTRATION

Electrical Engineer, E16047, California

#### MEMBERSHIPS

Institute of Electrical and Electronics Engineers (IEEE)

Illuminating Engineers Society (IES)

#### **PRIOR EXPERIENCE**

#### <u>1989-1994</u>

Project Engineer, HOK Architects & Engineers, San Francisco, CA

#### <u> 1994-1997</u>

Project Manager, Alfa Tech Engineers San Francisco, CA

1997-2000 Electrical Engineer, Mazetti Associates San Francisco, CA

#### 2000-Present

Director of Electrical Engineering Department Fard Engineers, Inc. Walnut Creek, CA

#### EXPERIENCE

Senior Electrical Engineer and Director of Electrical Engineering Department. Perry has over 26 years of experience in the field of electrical engineering. Responsible for the design, coordination and management of projects such as: Commercial, Institutional, Educational, Mission Critical data centers, Campus Style high rise office buildings, Residential high rises, hotels, laboratories and Health Care facilities. His responsibilities also include construction administration, budget management and Contractor selection.

#### SELECTED PROJECT EXPERIENCE

**Relevant Experience** 

- **Fire Station #83, Antioch, CA.** Remodel and addition of new dorm rooms in existing fire station (2007 to 2008)
- Fire Station #1, Walnut Creek. CA. Bathroom Facility Upgrade Remodel of bathroom. (2007-2008)
- Fire Station #96, Oakley, CA. New Construction of 6,500 sq. ft. fire station. (2006 to 2008)
- **Up-Grade Existing Fire Stations, CA.** Pleasant Hill #5, Martinez, #12, #13 and #14, Lafayette #15. (2008 to 2011).
- Fire Station #53, Brentwood, CA. 7,200 sq. ft., Brentwood, CA (2007-2010)
- Fire Station #24, San Mateo, CA. 6,000 sq. ft. (2011-2012)
- Fire Station #66, Richmond, CA. 6,200 sq. ft., Richmond, CA (2008).
- Fire Station #92 and 96, Tracy, CA. 7,500 sq. ft. each (2006-2010)

#### Public – Residential

- Monterey Bay Military Communities, Seaside, CA. 2,168 units of residential housing (2004 to present)
- Navy Housing Admiral Hartman, San Diego, CA. 76 units of residential housing. (2004 to 2007)
- Gateway Village, Navy Housing, San Diego, CA. 470 units of residential housing. (2003-2004)
- Navy Housing, Murphy Housing, San Diego, CA. 992 units of residential housing.
- Navy Housing, San Diego, CA. 1,500 units of residential housing, southwest. (2007 to 2010).
- **Dublin-San Ramon Water District, San Ramon, CA**. Alteration of existing building. Provide electrical design. Electrical construction cost \$500,000.00. (2010)
- Monterey La Mesa Recreation Center, 26,000 sq. ft. , Monterey, CA (2005 to 2007)
- Navy Family Cabrillo Heights, San Diego, CA. New construction of 900 units and approximately 9,500 sq. ft. recreation area (2001 to 2005).

### **AVERY COLTER, MECHANICAL ENGINEERING**



#### EDUCATION

Bachelor of Science in Materials Engineering University of California, Berkeley, 1990

#### REGISTRATION



#### **Mechanical Engineer**

- Certified Energy Plans Examiner For the 2008 California Residential Energy Standards Certificate #R08-07-1533
- Core Rater Verification and Diagnostic Test under the 2008 Building Energy Efficiency Standards CCNAC212300
- LEED v2 Accredited Professional

#### **PRIOR EXPERIENCE**

#### 1998-2001

AutoCAD drafter and AutoLISP programmer for telecommunications firm OSP Consultants in Concord, CA

2001-Present

Junior Mechanical Engineer, Title-24 Simulation Specialist, CHEERS Energy Analyst and Rater LEED-NC Accredited Professional Fard Engineers Inc., Walnut Creek, California

#### EXPERIENCE

More than 20 years of experience creating simulation models for thermal analysis to determine compliance with Title-24 requirements and EnergyStar and other incentives program requirements. Trained as analyst and rater for CHEERS, and as a LEED-NC AP.

#### SELECTED RECENT PROJECT EXPERIENCE

#### **LEED Certified Projects Include**

- Fire Station 24, San Mateo
- Chrissy Field Center, an Francisco, LEED Platinum (2013)
- Bristle Cone Pine Center, Bristle Pine Forest, LEED Gold
  (2013)
- Fairfield Latitude, San Jose, LEED Gold
- Verdant, San Jose, LEED GOLD
- Baypointe, San Jose, LEED GOLD
- Monterey La Mesa Recreation Center, LEED Silver (2013)
- Pacific Station, LEED Silver (2012)
- SFO Housing Sound Abatement, Daly City,
- Avalon Bay At Union Station, San Jose
- Avalon Pleasant Hill BART Transit Village
- Monterey housing LEED for Homes
- Monterey housing, Kidney Park, Energy Star
- University Village Albany
- Fort Irwin Military Housing
- Broadway And Maine, Newport Beach
- Navy Housing's Murphy Canyon, San Diego
- Oak Avenue Housing, South San Francisco



www.fard.com Consulting Engineers, Electrical / Mechanical

San Francisco San Diego San Francisco Office: 309 Lennon Lane Suite 200 Walnut Creek, CA 94598 (925) 932-5505 Fax (925) 932-0555 mailbox@fard.com

> H.T. (Sean) Fard, EE Max E. Saiidnia, ME Arthur W. Quaster (Senior Associate)

## FIRE STATIONS

Our Design Team has extensive knowledge of Fire House's special mechanical and electrical requirements through direct communication with Contra Costa Country Fire Protrection District staff. We have been working with Contra Costa Country Fire Protection District since 1995 and we have learned about fire houses special needs and operation.

We had special challenges learning solutions with regards to Fire Stations apparatus rooms, ventilation, building pressurization, fire truck muffler exhaust systems, apparatus room door controls and firemen living quarts special needs.

Job Name	Location	Company	Job Description
Oakley Fire Department	Oakley, CA	H & Y Architects	Addition of vehicle maintenance area to an existing fire station
El Cerrito Fire Station	El Cerrito, CA	HKIT - Main Office	A new one story, 5,400 s.f. fire station with apparatus, dorms, dayroom, kitchen and office. The design includes electrical, fire alarm, security, and radio control system.
Fire Station #3, Walnut Creek	Walnut Creek, CA	Loving & Campos Architects Inc.	A new one story, 5,400 s.f. fire station with apparatus, dorms, dayroom, kitchen and office. The design includes plumbing system, heat/ventilating system, electrical, fire alarm, security, and radio control system.
Firestation #87, Pittsburg	Pittsburg, CA	Loving & Campos Architects Inc.	Design the HVAC, Plumbing, Fire Protection and the Electrical systems for the new forestation
Fire Station #22 Crystal Ranch	Concord, CA	Loving & Campos Architects Inc.	New fire station in concord
Fire Station #2 & Admin. Emergency Generator	Pleasant Hill, CA	CCC Fire Protection District	Replace exist emergency generator at fire station #2 with new to serve fire station #2 and admin. bldg's.
Fire Station #11	Clayton, CA	Loving & Campos Architects Inc.	Provide electrical and mechanical engineering for new Fire Station #11 in Clayton, CA (station shall match that of Fire Station #87, #22, etc.).
Fire Station #52	Brentwood, CA	Loving & Campos Architects Inc.	Construction of new fire station in Brentwood.
Fire Station #30	San Ramon, CA	Loving & Campos	Construction of new fire station in San Ramon. Approximately 7,900 sq. ft.
Fire Station #34	San Ramon, CA	Loving & Campos Architects Inc.	500 sq ft. modification of toilet and kitchen area and 800 sq. ft. addition for new kitchen & exercise room.

Job Name	Location	Company	Job Description
Up - Grade Existing Fire stations	Contra Costa County	CCC Fire Protection District	Survey Report and construction cost est.
C.C.F.D. Telecommunications	2010 Geary Pleasant Hill	CCC Fire Protection District	Study and Report of Existing C.C.F.D. Telecommunications Facility
Fire Station #82	Brentwood, CA	Loving & Campos Architects Inc.	New Fire station
Fire Station #35	San Ramon	Loving & Campos Architects Inc.	Addition of approx. 700 sq. ft. exercise room
Up-Grade Existing Fire Stations	Contra Costa County	CCC Fire Protection District	Survey, Report and Construction Cost Estimate for upgrades to the following existing Fire Stations: Pleasant Hill #5, Martinez #12, #13, #14, and Lafayette #15.
Camp Park Fire Station	Dublin, CA	Loving & Campos Architects Inc.	New 8,000 sq. ft. fire station
Fire Station #10 & Training Facility	Concord, CA	CCC Fire Protection District	Replace existing emergency generator.
Fire Station #85, Pittsburg	Pittsburg, CA	Loving & Campos Architects Inc.	Designing the electrical, plumbing and the HVAC for the new 5,800 sq. ft. Fire Station.
Fire Station #84, Pittsburg	Pittsburg, CA	Loving & Campos Architects Inc.	Designing the electrical, plumbing and the HVAC for the new 5,800 sq. ft. Fire Station.
Fire Station #2 - Above Grade Fuel Storage	Pleasant Hill, CA	Stewart Enterprises II	This project consists of installing an above grade fuel storage tank.
Fire Station #9	Concord, CA	CCC Fire Protection District	Survey existing emergency power distribution and prepare report with recommendations for upgrading the electrical system. Finally preparing plans and specs for bid.
Fire Station #4	Concord, CA	CCC Fire Protection District	Survey existing emergency power distribution and prepare report with recommendations for upgrading the electrical system. Finally preparing plans and specs for bid.
Fire Station #1	Concord, CA	CCC Fire Protection District	Survey existing emergency power distribution and prepare report with recommendations for upgrading the electrical system. Finally preparing plans and specs for bid.
Fire Station #6	Concord, CA	CCC Fire Protection District	Survey existing emergency power distribution and prepare report with recommendations for upgrading the electrical system. Finally preparing plans and specs for bid.
Fire Station #56, Brentwood	Brentwood, CA	Loving & Campos Architects Inc.	Design services in the areas of Mechanical, Plumbing and Electrical systems including above ground fuel storage tank, fueling station and a 75kw Emergency power system, for a new 6,500 sq. ft. Fire Station. Also performance specifications for the automatic fire sprinkler system.
MS Modular Office at Station 20	Concord, CA	Loving & Campos Architects Inc.	Providing Design/Build Specifications for the Plumbing and the automatic fire sprinkler, for the 2,240 sq. ft. modular building addition to the Fire Department Training Center on Treat Blvd.



## **Representative Projects**

## Architect/Clients

Fire Station 66, Richmond



#### Tracy Fire Station, 530 Tracy Blvd., Tracy, CA

## Project Description:

New construction of 6,200 sq. ft. Fire Station 66 that will replace the existing station on the same site. The fire station is being designed to achieve LEED Silver Certification

Month/year construction began/completed (2008-2010)

Construction Budget was \$4MM Our Fee: 45,950.00

Shah Kawasaki Architects 1111 Broadway, Suite 1650 Oakland, Ca 94608 P 510.663.6060 Alan Kawasaki 510.663.6090



#### **Project Description**:

A new 10,000 sq. ft. fire station. 2-Bay apparatus fire station on 2 acres. Station will have residential quarters, offices, flex wing. Project is under design with Gold LEED status

Month/year construction began/completed (2007-2009)

Project Manager: Max Construction cost unknown. Our Fee \$38,500.00

Loving & Campos Architects 245 Ygnacio Valley Rd., Ste 200 Walnut Creek, CA 94596 Gary Willoughby gwilloughby@loving-compos.com



## **Representative Projects**

## Architect/Clients

Fire Station 85, Pittsburg



#### **Project Description:**

Designed the electrical, plumbing and the HVAC for the new 5,800 sq. ft. Fire Station.

Month/year construction began/ completed (2002-2004)

Construction cost unknown Our Fee \$16,500.00

Project manager: Art Quaster

Loving and Campos Architects 245 Ygnacio Valley Road, Suite 200 Walnut Creek, CA 94596 Mr. Gary Willoughby gwilloughby@loving-compos.com

#### Fire Station #24, 319 Humbolt, San Mateo



### **Project Description:**

New fire station in San Mateo

Month/year construction began/ completed (2010--2012)

Construction cost unknown. Our Fee \$41,800.00

Project manager: Max Saiidnia

Shah Kawasaki Architects 1111 Broadway, Suite 1650 Oakland, Ca 94608 P 510.663.6060 Alan Kawasaki 510.663.6090

## **Professional Staff**

 <u>Principals</u> Max Saiidnia, P.E.



## <u>Northern California Staff</u>

#### Mechanical Engineers

Saed Saiidnia Kevin Shen Alex Garakani, LEED Navid Saiidnia Kyle Hauser

#### **Electrical Engineers**

Perry Saeednia, P.E. Art Quaster Zack Sarhan

#### CAD Staff

George Mercader, Director of CAD Corey Yamada, CAD Drafter Shokooh Saiidnia, CAD Drafter

### Mechanical Designers

Avery Colter, Title 24 Code Specialist Albena Duombalska

## **Electrical Designers**

Kyaw (Joe) Soe Amir Shahi Brad Edelat

#### Communications Engineer George Mercader

Administration Karen Veeraswami Chris Meairs

## <u>Southern California Staff</u>

Mechanical Engineer Bijan Nikravesh

Electrical Engineer Michael Bowden **Cad Staff** Jamila Jordan

Mechanical Designer Matt Constant

> Administration Jamila Jordan





## **Proposal**

 Date:
 1/11/2017

 Proposal #:
 17-01473

 Work Done By
 Monica Van D...

**Fire Station 3** 

**Rohnert Park, CA** 

LCA Architects 590 Ygnacio Valley Road Suite 310 Walnut Creek, CA 94596

Description	Qty	Unit Price	Total
Title-24 Energy Compliance Reports - Non Residential Mechanical, Lighting, and Envelope for Fire Station 3 at Rohnert Park	1	450.00	450.00
Scope of work: Provide the T24 Compliance documentation (reports and plan sheets) for submittal to the building department, using CEC certified software, upon approval of project Energy Measures Summary by Client. Registered T24 documents are provided in PDF format with electronic signatures. Also included is preparation of incentive program materials should Client decide to participate and Building Department plan check comment responses. Client revisions after submittal to building department not required by plan check corrections may be charged an additional fee. Work will not be started without a signed proposal agreeing to payment terms.			

#### THANK YOU FOR YOUR BUSINESS!

#### Net 30 Term Agreement:

As an authorized signatory for the company requesting services, I agree to pay any and all invoices from DuctTesters within 30 days, and acknowledge and understand that Ducttesters will charge a 2.5% daily late fee per invoice on any past due amount beginning on the 31st day from the date of the invoice. I also acknowledge and understand that if the account should go beyond 45 days past due all services will be withheld until the account is brought current or arrangements have been made with DuctTesters otherwise.

I hereby certify that I am an authorized signatory for the company requesting services from DuctTesters, Inc. Signing this proposal below shows acceptance of the prices and proposed work as described above.

Proposal Accepted By (Print Name)

Signature

# D06 Landscape

planning & landscape architecture	Tery Camp Principal purly rate \$175.00	Pam Winther Project Manager \$140.00	Kevin Levesque Project Designer \$125.00	Corey McCannon Project Coordinator \$115.00	Fire S	E SCHEDULI Station 3, RF 12/20/2016
Project Management	1.5	2	2	0	5.5	HOURS
	\$262.50	\$280.00	\$250.00	\$0.00	\$793	SUBTOTAL
Project Coordination	1.5	0	0	0		
Client Coordination Meetings	1.5	2	2	0		
Programming / Schematic Design	2	7	4.5	2	15.5	HOURS
	\$350.00	\$980.00	\$562.50	\$230.00	\$2,123	SUBTOTAL
Meetings / Notes	1	1	1			
Site Verification / Documentation Preliminary Review with Agencies	0	2	0.5	0		
Design	1	4	2	0		
LEED Coordination	0	0	0	0		
Design Development	1	6	8	8	23	HOURS
	\$175.00	\$840.00	\$1,000.00	\$920.00	\$2,935	SUBTOTAL
Design Documentation	0	2	6	8		
Quality Control	0.5	2	1	0		
Consultant Coordination LEED Coordination	0.5	2	1	0		
	0	0	0	0		
Construction Documents	2	10	22	48	82	HOURS
	\$350.00	\$1,400.00	\$2,750.00	\$5,520.00	\$10,020	SUBTOTAL
Drawings	0	4	16	48		
Specifications	0	0	4	0		
Consultant Coordination	1	2	2	0		
Quality Control	1	2	0	0		
Agency Approvals LEED Coordination	0	2	0	0		
	0	0	0	0		
Bidding Assistance	0	5.5	2	2	9.5	HOURS
	\$0.00	\$770.00	\$250.00	\$230.00	\$1,250	SUBTOTAL
Bid Document Distribution	0	0.5	0	2		
Bid Site Walk		2	0	0		
BID Clarifications	0	2		0		
Addenda	0	1	2	0		
Construction Administration	1	8	4	0	13	HOURS
	\$175.00	\$1,120.00	\$500.00	\$0.00		SUBTOTAL
Consultant Coordination		2	0	0		
RFIs	0	2		0		
Submittal Reviews	0	0	2	0		
Site Visits (includes travel time & associated meeting notes)	0	2	0	0		
Bulletins (Field Change Directives)	0	0	0	0		
Review Preliminary Change Orders	0	0	0	0		
Change Orders Payment Applications	0	0	2	0		
Punch List	0	1	0	0		
Close Out	1	1	0	0		
					L	
Hours per Person	7.5	38.5	42.5	60	148.5	HOURS
Cost per Person	\$1,312.50	\$5,390.00	\$5,312.50	\$6,900.00	\$18,915	TOTAL

# D13 Cost Estimation

International Management & Construction Consultants

Also in Atlanta, Chicago & New York

January 10, 2017

Mr. Brent Randall Loving & Campos Architects Inc. 590 Ygnacio Valley Road Suite 310 Walnut Creek CA 94596

#### Delivered by Email.

Dear Brent,

#### Ref: City of Rohnert Park Fire Station – LCA Project #16024 Cost Estimating Request for Proposal

Thank you for your email and this opportunity. We are indeed very interested in the above project and feel we would be well suited to help you in this pursuit. We have prepared this proposal for your review and we fully understand the importance of this assignment to deliver accurate cost planning through all stages of design.

The following work stages refer to the attached Cost Management Methodology document:

#### 1. Schematic Design Cost Estimate (April 2017)

		Lump Sum Fee	\$2,600
2.	Design Development Cost Estimate (May 2017)		
		Lump Sum Fee	\$5,800
3.	50% Construction Documents Cost Estimate (June 2017)		
		Lump Sum Fee	\$8,100
4.	<b>90% Construction Documents Cost Estimate</b> – Tracking chang Documents to 90% Construction Documents (August 2017)	es from 50% Constructio	n
		Lumn Sum Fee	\$4 000

Lump Sum Fee \$4,000







#### 5. Additional Services

Should Gleeds' services be expanded to cover items of work not part of the attached Cost Management Methodology, these will be carried out at the hourly rates broken down in the attached Standard Appointment Terms, but only when authorized in advance. We will also be happy to agree a lump sum if it is more appropriate once the scope is defined.

Once again, we thank you for considering Gleeds and we look forward to working with LCA Architects on this project. We would of course, welcome the opportunity to discuss the content and structure of this proposal in more detail at your convenience.

As a provider of independent construction advice to Owners for 130 years, our cost management skills are embedded in our corporate culture and are fundamental to our doctrine of achieving best value for your projects.

Yours sincerely,

Stuart A. Lumsden Executive Vice President

Encl. Gleeds USA (SF) Standard Appointment Terms Cost Management Methodology

Accepted by:

Signed – LCA Architects Inc.

Date

Print Name / Position

#### **Gleeds USA (SF) Standard Appointment Terms**

#### Services and Duty of Care

The services to be provided ("the Services") will be as set out in correspondence between us and in providing them we will exercise the skill, care and diligence reasonably to be expected of suitably qualified consultants undertaking services of the type to be provided by us.

#### Professional Indemnity Insurance

We will maintain professional indemnity insurance covering our liabilities for negligence with a limit of One Million Dollars (\$1,000,000) and we will maintain such insurance at all times until six years after completion of the Services, so long as it is available in the US insurance market at commercially reasonable rates and terms.

If for any reason such insurance is not obtainable at commercially reasonable rates and terms, we will inform you and will use reasonable endeavours to obtain such reduced cover (if any) as is then available and as would be fair and reasonable in the circumstances for us to obtain.

#### Payment

Where a fee has been agreed for the Services, this will be due and invoiced as set out in correspondence between us and the final date for payment will be 30 days after the date of the invoice. Where a fee has not been agreed our standard hourly rates will apply with expenses charged at cost plus a 5% administration fee. These arrangements also apply if you instruct us to provide additional services or if we have to do extra work due to circumstances we cannot control (such as project delays, changes to previously approved designs, change of law, etc).

The following hourly rates are effective through December 2017:

Principal	\$230.00 per hour
Vice President	\$210.00 per hour
Director	\$190.00 per hour
Executive Project Consultant	\$170.00 per hour
Senior Project Consultant	\$160.00 per hour
Mechanical and Electrical Estimator	\$160.00 per hour
Project Consultant	\$150.00 per hour
Assistant Project Consultant	\$130.00 per hour
Administrative	\$65.00 per hour

#### Expenses

Our proposals excludes expenses comprising travel, accommodation and incidentals, reproduction costs, express delivery and courier services. These are all reimbursable at cost plus a 5% administrative fee.

#### **Confidentiality**

We will treat as confidential all confidential information given to us in connection with the Services and will take reasonable steps to see that our employees do likewise. You will treat as confidential all prices and other confidential information given to you in connection with the Services and will take reasonable steps to see that your employees and other consultants and contractors do likewise. Disclosure to legal and insurance advisers, auditors and sub-consultants is permitted so long as they are subject to confidentiality obligations and information in the public domain or which came to the party in question from another source will not be treated as confidential.

#### Liability

Save in relation to death or personal injury our liability howsoever arising will be limited to One Million Dollars (\$1,000,000) and we shall have no liability for loss of profits, loss of opportunities, loss of contracts, loss of goodwill, increased operating costs or consequential or economic losses.

It is not intended that we should have any asbestos-related duties or liabilities but to the extent that any nevertheless arise whether under statute or otherwise our liability in relation to asbestos-related claims shall (save in relation to death or personal injury) be limited to the sum of Four Hundred Thousand Dollars (\$400,000).

If any other persons are partially responsible for any loss that you suffer, we will be liable proportionally on the basis that you are deemed to have recovered from the other persons the proportionate amount that represents their contribution to your loss.

We will have no liability under this Agreement to any person other than you.

#### Assignment

Neither you nor we may assign the benefit of this agreement without the consent of the other but we may sub-contract the performance of parts of the Services subject to notifying you in writing of the name of the sub-consultant. We will remain liable for work sub-contracted.

#### **Our Work Product**

Any work product, deliverable or report prepared by Gleeds' personnel, or delivered by Gleeds shall bear the appropriate Gleeds' trade or service marks and/or logos, as provided by Gleeds. Such documents shall be signed, if signature is required, by an appropriate Gleeds' professional. If any such product is or may be included in or appended to a document, deliverable or report including work by others, that portion created by Gleeds should be identified by an appropriate mark or logo. Gleeds' employees shall be identified as such in all communications, verbal or written, though it is acceptable for Gleeds and its employees to be identified as subconsultants, subcontractors, independent contractors or otherwise in the employ of or under the direction of a prime contractor, and for any Gleeds mark or logo to be displayed with or alongside other marks or logos.

Nothing in this provision shall be interpreted as a license to use or waiver of protections for protected marks, logos or other intellectual property of Gleeds, unless expressly stated to the contrary in writing.

#### **Speculative Work**

If we have agreed to do work speculatively you will pay us a fair and reasonable sum based on our standard hourly rates or as set out in correspondence between us, in the event that you purchase the site or development, or you dispose of your interest in the site or development.

#### Amendments

No change to this Agreement will be effective unless it is in writing and signed by an officer of the company.

#### **Suspension and Termination**

We shall be entitled at our discretion to terminate the Agreement or suspend our services in whole or in part in the event of you committing any breach of the terms of this Agreement and in the case of a breach which is capable of remedy which has not been remedied within 7 days of our notice to do so; or if you become bankrupt or commit an act of bankruptcy or make any arrangement or composition for the benefit of creditors or go into liquidation (save for the purpose of reconstruction or amalgamation without insolvency) in which case we shall be entitled to payment for services performed before termination or suspension together with compensation and loss of profit.

#### **Dispute Resolution**

Any dispute between us arising out of or connected with this Agreement or the Project that is not resolved by negotiation or mediation shall be referred to an determined by a sole arbitrator to be agreed between us or in default of agreement, appointed by the American Arbitration Association

#### **Consequential Damages**

We both agree to waive consequential damages for claims, disputes or other matters in question arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement.

#### Governing Law

The agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) will be governed by the Laws of the State of California and the United States of America.

## GLEEDS COST MANAGEMENT APPROACH & METHODOLOGY



## ADDING VALUING FOR CLIENTS THROUGH CONSISTENT, LOGICAL AND INNOVATIVE PROCESSES AND TECHNIQUES

Our ultimate goal is to prevent overspend on your construction projects with a number of benefits as a result, including:

- ✓ Greater control
- Improved cost certainty through a design to cost approach
- $\checkmark$  The right level of information to make informed decisions
- ✓ Optimum balance of cost and quality
- ✓ Reduced risk
- ✓ Market intelligence

Our cost management methodology is summarized within, split into the following stages:

	Pre-design	Building Information Modeling (BIM): Reducing risk, driving collaboration
	Design	Using intelligent software Gleeds can extract and model data created in design and construction BIMs to support estimates, cost models, risk analysis and value
Ó	Procurement	management. This coupled with our custom cost management programs and an ethos of collaboration and co-operation ensures that we operate efficiently and
	Construction	effectively. Gleeds can also assist in the development of BIM protocols, taking a strategic approach to information management to the benefit of the project throughout all stages of its life.
Ó	Close Out & Occupancy	

The methodology demonstrates our actions, delivery and the benefits to Clients. Each project will have a customized delivery plan agreed in advance between the client and the Gleeds project team.



### WORK STAGES DELIVERABLES

		<b>A</b>	✓ Order of Magnitude/Concept Estimate
Z	1	Appraisal	✓ Approved Baseline
PRE-DESIGN			✓ Benchmarking analysis
-D			✓ Risk analysis
РК	2	Design Brief	✓ Cash flow projection
			✓ Alternative value propositions

ACTION	WHAT WE DELIVER	HOW WILL THIS ADD VALUE?
<ul> <li>Establish the constraints of the</li> <li>project including:</li> <li>Visiting the site</li> <li>Reviewing existing design proposals</li> <li>Reviewing third party and schedule constraints</li> <li>Agreeing exclusions</li> <li>Recording key assumptions</li> </ul>	<ul> <li>A cost estimate consistent with the client's appraisal and fully aligned with the business case for the project</li> </ul>	<ul> <li>A clear understanding of client requirements will enable the project team to focus on costs, while avoiding oversights and double counting</li> </ul>
<ul> <li>Agree timescales and reporting regimes</li> <li>This will be done for each phase of the project, including a formal change management regime</li> </ul>	A coordinated design schedule	Real-time cost reconciliation will enable more informed client choices
<ul> <li>Prepare cost models</li> <li>Cost models will be based on existing benchmarking data. Where appropriate, a separate mechanical and electrical analysis will be provided by our specialist in-house services team</li> </ul>	A report in line with Gleeds guidelines for estimating cost planning	<ul> <li>Best practice and recognised industry standards</li> <li>Consistent measurements and formats</li> <li>Provide reassurance for other parties (e.g. contractors) to buy-in to cost advice</li> </ul>



## PRE-DESIGN

ACTION	WHAT WE DELIVER	HOW WILL THIS ADD VALUE?
<ul> <li>Identify project-specific cost drivers</li> <li>Our cost estimates will identify the specific cost drivers and abnormalities for each project</li> </ul>	Divergence from benchmark and project target costs will be identified. We will also create a fully costed list of possible alternatives	<ul> <li>Ensure the design team has a thorough understanding of the value and impact of its design choices</li> <li>Establish a focused value strategy from the outset, avoiding redundant design and keeping to design schedules</li> </ul>
<ul> <li>Support design workshops</li> <li>We will provide on-going input and support into design workshops</li> </ul>	<ul> <li>Practical advice on the impact on income and value of different cost strategies, supported by optioneering alternatives</li> </ul>	<ul> <li>Avoid unnecessary and unrealistic design studies</li> <li>Establish a value-focused culture</li> </ul>
<ul> <li>Create a risk register</li> <li>We will create a risk register for the project</li> </ul>	<ul> <li>A project risk analysis, divided into:</li> <li>Design development</li> <li>Construction risk</li> <li>Commercial risk</li> <li>Client change</li> <li>Client's other risks</li> </ul>	<ul> <li>Reduce project risk</li> <li>Enable realistic assessments of risk impact, rather than 'blind' percentage contingencies</li> <li>Provide a formal mitigation tool for subsequent project phases</li> </ul>
Support the client in setting preliminary project delivery strategies	<ul> <li>An action plan and briefing note for the next design phase, which clearly states the timescales and requirements from all parties</li> </ul>	<ul> <li>Provide clarity on project direction</li> <li>Reduce risk of unknowns diverting effort and causing schedule slippage</li> <li>Provide national market intelligence</li> </ul>
Support the client appraisal with cash flow and inflation commentary	The expertise and insight of our experienced team	Realistic sector specific estimates will avoid global percentage additions



#### WORK STAGES

#### DELIVERABLES

	3	Concept / Schematic	<ul> <li>✓ Estimates in Uniformat &amp; CSI</li> <li>✓ Target cost and specialist market testing</li> </ul>
DESIGN	4	Design Development	<ul> <li>✓ Evaluate design solutions</li> <li>✓ Evaluate sustainability goals</li> <li>✓ Whole-life cost analysis</li> </ul>
	5	Construction Documents	<ul> <li>Structured approach to identifying, managing and mitigating risk</li> <li>Value engineering</li> </ul>

ACTION	WHAT WE DELIVER	HOW WILL THIS ADD VALUE?
Attend design workshops	<ul> <li>Real-time cost advice and alternative design suggestions, materials and construction methods</li> </ul>	A clear understanding of client requirements will enable the project team to focus on costs, while avoiding oversights and double counting
Develop elemental, trade or functional analysis of the cost model, with specialist market intelligence	<ul> <li>Cost-against-target reviews to help avoid unnecessary costs and achieve value engineering targets</li> </ul>	Real-time cost reconciliation will enable informed client choices
Establish a formal change management protocol	<ul> <li>Regular cost trackers to record design changes and their impact on schedule and cost</li> </ul>	<ul> <li>Best practice and recognised industry standards</li> <li>Consistent measurements and formats</li> <li>Provide reassurance for other parties (e.g. contractors) to buy-in to cost advice</li> </ul>
Contribute to market research initiatives	Specialist elemental design and cost support	<ul> <li>Demonstrate sub-contractor buy-in, buildability and high cost certainty at an early stage</li> </ul>
Budget sign-off at each project phase	Formal cost plans to complement design stage reports	Provide a clear audit trail of design choices and instructions through our cost tracker change management process



## WORK STAGES

#### DELIVERABLES

REMENT	6	Bid Documentation	<ul> <li>✓ Develop RFPs and RFQs</li> <li>✓ Technical evaluation of contractor's proposals</li> </ul>
PROCUREMENT	7	Evaluation & Award	<ul> <li>Robust contract terms</li> <li>Optimizing leverage</li> </ul>

ACTION	WHAT WE DELIVER	HOW WILL THIS ADD VALUE?
<ul> <li>Set the project delivery plan</li> <li>Agree the project delivery plan with the client and team</li> <li>Consider incentive schemes</li> <li>Balance project constraints of design status, time to start on site, client risk profile and third party influences</li> </ul>	<ul> <li>A formal action plan, with input from the whole team, which sets out clear dates and responsibilities</li> <li>Utilizing our market intelligence to draw up lists of potential general contractors and second tier suppliers</li> </ul>	<ul> <li>Administer the whole process to an agreed timetable</li> <li>Implement a documented process to provide transparency and drive competition</li> <li>Establish project delivery strategies that deliver best value without inappropriate risk transfer</li> </ul>
<ul> <li>Procure the most suitable</li> <li>contractor</li> <li>Host and chair project delivery workshops, pre-qualification interviews, mid-bid reviews and formal post-bid interviews, before final selection</li> </ul>	<ul> <li>A formal bid report will provide a full audit of the process and a clear recommendation</li> </ul>	<ul> <li>Establish a robust and realistic bid</li> <li>Analyze bid returns</li> <li>Report on bids, inappropriate risk taking and overall compliance</li> <li>Promote collaboration and openness and dispel 'us versus them' attitudes</li> </ul>
Coordinate with the client's legal advisors on contract conditions amendments	Regular cost trackers to record design changes and their impact on schedule and cost	Remove contractor's clarifications from the selection process by dealing with them in advance of bid returns



ACTION	WHAT WE DELIVER	HOW WILL THIS ADD VALUE?
Manage the collation and distribution of project information	Specialist elemental design and cost     support	Demonstrate sub-contractor     buy-in, buildability and high cost     certainty at an early stage
Assess the scope of documentation required to secure strong bid action	Formal cost plans to complement design stage reports	Provide a clear audit trail of design choices and instructions through our cost tracker change management process
Encourage best value	Enquiry documents that invite bidders to submit better proposals, alternative materials, more efficient schedule methods and risk mitigation strategies	Enable the client to make informed choices to maximise time, quality and risk measures



#### WORK STAGES

#### DELIVERABLES

CONSTRUCTION	8	Mobilization	<ul> <li>✓ Establish cost control procedures</li> <li>✓ Monthly requisition reviews</li> </ul>
ONSTF		Construction to Substantial	<ul> <li>Cost and schedule reporting</li> <li>Change erder and reporting</li> </ul>
Ö	3	Completion	✓ Change order analysis and negotiation

ACTION	WHAT WE DELIVER	HOW WILL THIS ADD VALUE?
Cost control and formal reporting	<ul> <li>A forward looking financial reporting regime</li> <li>Tailored in-house systems to suit each client, for both frequency and content</li> </ul>	<ul> <li>Ensure consistency in reporting to suit the client's internal requirements e.g. formats and deadlines</li> </ul>
Change management	<ul> <li>Tracked and forecasted changes</li> <li>Reports that are sub-divided e.g. unforeseen works (due to site conditions); design development; client changes</li> </ul>	Help the client avoid unnecessary changes
Monthly payments and final accounts	<ul> <li>A schedule of pre-agreed payment dates, along with plans for offsite or overseas materials</li> <li>Monitoring of cash flow, payments against change and pay applications</li> </ul>	<ul> <li>Agree contractual changes as the works progress</li> <li>Provide live final accounts</li> <li>Provide the client with greater certainty of the final costs</li> </ul>
Project meetings	<ul> <li>Strong, transparent and consistent project management</li> <li>Effective and inclusive collaboration with all stakeholders</li> </ul>	<ul> <li>Contribute to problem solving</li> <li>Ensure value is considered in all solutions</li> </ul>



### WORK STAGES

#### DELIVERABLES



ACTION	WHAT WE DELIVER	HOW WILL THIS ADD VALUE?
Attend target review and post project evaluation workshops	An open debate about the success and difficulties of the project	Incorporate lessons learnt into     future projects and phases.
Cost analysis	<ul> <li>Analysis of final accounts and project benchmarks</li> <li>Summary of lessons learnt from abnormal costs and inappropriate risks</li> </ul>	<ul> <li>Benefit future projects and phases through feasibility studies based on more accurate data</li> </ul>

#### Attachment B



#### LCA ARCHITECTS, INC. 2016 FIRST QUARTER HOURLY FEE SCHEDULE\*

	DESCRIPTION	HOURLY RATE
	Principal	\$210.00
	Principal Emeritus	\$210.00
	Associate	\$190.00 to \$210.00
	Project Manager	\$190.00
	Project Architect	\$135.00 to \$180.00
	Quality Control Manager	\$190.00
	Specifications Writer	\$190.00
	Job Captain	\$110.00 to \$125.00
	Designer	\$90.00 to \$170.00
	CAD Tech	\$90.00 to \$135.00
	Project Coordinator	\$95.00 to \$130.00
	Administration/Research/Presentations	\$90.00 to \$105.00
	Clerical	\$105.00
	Architectural Animation - Preparation of computer generated views, renderings and simulations of architectural interiors and exteriors. Preparation of video "fly-by's," walkthrough's, and other simulations.	\$165.00/hr.
	<i>Expert Witness</i> - Review of documents, meetings, site visits, telephone conferences, administration of the documents and materials, research, deposition, testimony, court appearances, and travel time.	\$500.00/hr.
	Perspective Sketches and Renderings, Visual Simulations	On a Per Drawing Basis
	Mileage (outside of the Walnut Creek area) **as adjusted by IRS guidelines	0.65.5/mile**
	Copies, prints, CADD plots, photography, prepar colored print mounting, long distance phone cal mail, and travel outside the Walnut Creek area at cost plus 15%.	lls, FAX transmissions, postage, express
AARCHITECTS	Overtime - If overtime is required by staff, additional hourly fee charges may apply. California	to meet a customer's timing request rnia employment law will apply.
0 Ygnacio Valley Road te 310		

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