BID DOCUMENTS

including Specifications for construction of:

The COUNTY OF MENDOCINO

Mendocino County Sheriff's Department Warehouse Project

841 Low Gap Road Ukiah, CA 95482



Prepared by: FACILITIES & FLEET DIVISION 851 LOW GAP ROAD UKIAH, CA 95482

BID# 015-25

Date of Issue:

April 29, 2025

SECTION 00 50 00

AGREEMENT FOR LUMP SUM BID

THIS AGREEMENT is made effective on the date it becomes fully executed by all parties, between the <u>County of Mendocino</u>, hereinafter called COUNTY, and James Day Construction Inc., a California Corporation, DBA Coastal Mountain Electric, hereinafter called CONTRACTOR.

COUNTY and CONTRACTOR, for the consideration described below, named, agree as follows:

FIRST:CONTRACTOR shall furnish all labor, materials, equipment, mechanical workmanship, transportation, and services for the installation and completion of the **Mendocino County Sheriff's Department Warehouse Project**, in accordance with the contract documents, including the Addenda thereto, all as adopted by the COUNTY.

SECOND: The work under this contract described below shall be completed within sixty (60) calendar days from the date of the "Notice to Proceed".

THIRD: The Contract consists of the following documents, all of which are fully a part hereof as if herein set out in full, whether or not hereto attached:

- Invitation to Bid
- 2. Instructions to Bidders
- 3. Bidding Documents
- 4. Agreement
- 5. General Conditions
- 6. Unforeseen Physical Conditions
- 7. Summary of Work
- 8. Temporary Facilities and Building Services
- 9. Project Plans and Drawings
- 10. Technical Specifications
- 11. Addendum to the Bid

FOURTH: COUNTY shall pay to CONTRACTOR, if CONTRACTOR is the successful bidder, as full consideration for the faithful performance of the Contract, the sum of:

Two Hundred Twenty-Four Thousand Six Hundred Thirty-Nine Dollars and Zero Cents (\$224,639.00)

Payment shall be made each month to CONTRACTOR in accordance with and subject to the provisions embodied in the Documents made a part of this Contract.

IN WITNESS WHEREOF DEPARTMENT FISCAL REVIEW: CONTRACTOR/COMPANY NAME anous. DEPARTMENT HEAD 29/2025Date: NAME AND ADDRESS OF CONTRACTOR: Budget Unit: 1710 James Day Construction Inc., DBA Coastal Line Item: 864360 Mountain Electric, a California Corporation Grant: ☐ Yes ☐ No 14832 Lakeshore Drive Clearlake, CA 95422 Grant No.: ___ COUNTY OF MENDOCINO By signing the above, the signatory warrants and represents that he/she executed this Agreement in his/her authorized capacity and that by his/her signature on this Agreement, he/she or the entity BOARD OF SUPERVISORS upon behalf of which he/she acted, executed this Agreement. Date: 06/03/2025 ATTEST: COUNTY COUNSEL REVIEW: DARCIE ANTLE, Clerk of said Board APPROVED AS TO FORM: 06/03/2025 I hereby certify that according to the provisions of COUNTY COUNSEL Government Code section 25103; delivery of this document has been made. 05/29/2025 DARCIE ANTLE, Clerk of said Board 06/03/2025 **INSURANCE REVIEW: EXECUTIVE OFFICE/FISCAL REVIEW:** Risk Management 05/29/2025 Date: Date: Signatory Authority: \$0-25,000 Department; \$25,001-50,000 Purchasing Agent; \$50,001+ Board of Supervisors Exception to Bid Process Required/Completed Mendocino County Business License: Valid Exempt Pursuant to MCC Section:



COUNTY OF MENDOCINO

Executive Office

Facilities & Fleet Division

DARCIE ANTLE
Chief Executive Officer
Clerk of the Board
Purchasing Agent

851 Low Gap Road Ukiah, CA 95482 Email: facilities@mendocinocounty.gov

Office:(707)234-6068

COUNTY OF MENDOCINO + BID ADDENDUM

BID No. CI096

Mendocino County Sheriff's Warehouse Project

Addendum No.
Addendum Issue Date:

Bid Issue Date: Bid Opening Date: 01

May 19, 2025 April 29, 2025 May 22, 2025

INQUIRIES AND CLARIFICATIONS TO PROJECT PLANS AND SPECIFICATIONS

The additions, omissions, clarifications, and/or corrections herein shall be made part of the Contract plans and specifications and included in the Scope of Work and proposals to be submitted. This Addendum modifies the original plans and specifications as described below.

ADDITIONAL INFORMATION

Please see the attached Nicols, Melburg, & Rossetto Addendum No. One and attached sheets.

All other specifications remain in full force and effect.

Bidders are reminded to complete the Addenda Acknowledgement on the Bid Form. Failure to do so may result in the bid being disqualified.

Any questions or concerns regarding this matter should be directed to Kirk Viera, Facilities Project Specialist, at vierak@mendocinocounty.gov; Office: (707) 234-6058 Mobile: (707) 380-3223.

ADDENDUM NO. ONE



Date: May 17, 2025

PROJECT: Mendocino County

Sheriff's Department Warehouse Project

B!q # 012-52

GENERAL: This **Addendum Number One** shall be inserted into your set of Drawings and Specifications for this project and shall take precedence over the original Drawings and Specifications. Acknowledge receipt of this Addendum in the space provided on

the Bid Form. Failure to do so may subject the Bidder to disqualification.

I - CHANGES TO SPECIFICATIONS (ITEMS NOTED WITH AN "S" PREFIX):

S1.01 Replace Specifications Section 32 31 13, "Chain Link Fences & Gates" with attached specification section 32 31 13.

II - CHANGES TO DRAWINGS (ITEMS NOTED WITH A "D" PREFIX):

D1.01 Refer to Drawing A201. Replace Floor Plan Sheet Note #4 to state the following:

"4. Freezer (O.F.O.I.) on Back-up Power, See Electrical Drawings for more information."

D1.02 Refer to Drawing A201. Add a call out to Sheet Note #10 pointing at the exterior

door in Storage Room 152.

D1.03 Replace Drawing sheet E201 with attached revised Drawing sheet E201, Make

revisions as indicated within clouded areas.

D1.04 Add Drawing T001, "Data Plan" per attached Drawing T001.

D1.05 Refer to Drawing M201. Add the following general note:

"D. Furnish and install sheet metal caps with stainless steel screens at all vehicle exhaust capture duct drops to be removed."

(1 Page 8 ½ x 11)

(2 Pages 30 x 42)

(1 x 3/ 8 seges 8 % x 11)

Respectfully,

Kyle Matti

Nichols, Melburg, and Rossetto

Attachments: Specifications 32 31 13:

Drawings E201, T001: Pre-Bid Site Walk Attendanc

Pre-Bid Site Walk Attendance Sheet:

SECTION 32 31 13

CHAIN LINK FENCES AND GATES

PART 1 GENERAL

1.1 WORK INCLUDED

- A. Fence framework, fabric, and accessories.
- B. Concrete anchorage for posts.
- C. Manual gates and related hardware.

1.2 REFERENCES

- A. ASTM A90/A90M Zinc alloy coating test methods.
- B. Product Manual CLF 2445 Chain Link Fence manufacturers institute.
- C. ASTM A123 Pipe, Steel, Black and Hot-dipped Zinc-coated (Galvanized) Welded and Seamless, for Ordinary Uses.
- D. ASTM A392 Zinc coated steel chain link fence fabric.
- E. ASTM F567 Installation of chain link fencing.

1.3 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in commercial quality chain link fencing with five years experience.
- B. Installation: ANSI/ASTM F567.

1.4 SUBMITTALS

- A. Product Data: Submit product data for all specified products.
- B. Shop Drawings:
 - 1. Include plan layout, grid, spacing of components, accessories, fittings, hardware, anchorages, and schedule of components.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Anchor Fence Co.
- B. Builders Fence Co.
- C. Or accepted equal.

2.2 MATERIALS

- A. Framework: ASTM A120; galvanized Schedule 40 steel pipe, standard weight, one piece without joints.
- B. Fabric: 2" mesh, 3.5 diamonds per foot of height, 9 gage, zinc coated steel wire fabric ASTM A392. Knuckled top and bottom selvage.
- C. Steel Pipe: Type I: ASTM F-1083, Galvanized Schedule 40 steel pipe, standard weight, Framework and fittings.

2.3 COMPONENTS

- A. Line Posts: 2.375" O.D. galvanized steel pipe
- B. Pull, Corner and Terminal Posts: 2.375" galvanized steel pipe
- C. Top and Brace Rail: 2.375" diameter, plain end, sleeve coupled steel pipe
- D. Gate Posts: 2.375" O.D.
- E. Gate Frame: 1.90" O.D. 1. Bracing: 1.66" O.D.
- F. Caps: steel or malleable iron, galvanized coated. Sized to post dimension, set screw retained.
- G. Fittings: Sleeves, bands, clips, rail ends, tension bars, fasteners and fittings: galvanized steel.
- H. Tension Wire: 7 gage thick steel, single strand.
- I. Swinging Gate Hardware: Fork type latch with gravity drop; center gate stop and drop rod; Mechanical keepers; two 180 degree gate hinges per leaf and hardware for padlock.
- J. Baseplates for fence posts at existing concrete floor: 8" square x ½" thick.

2.4 FABRICATION

- A. Gates: Construct gates with interior bracing and truss-rods to span opening without deflection.
- B. Accessories: Same finish as framing.

2.5 FINISHES

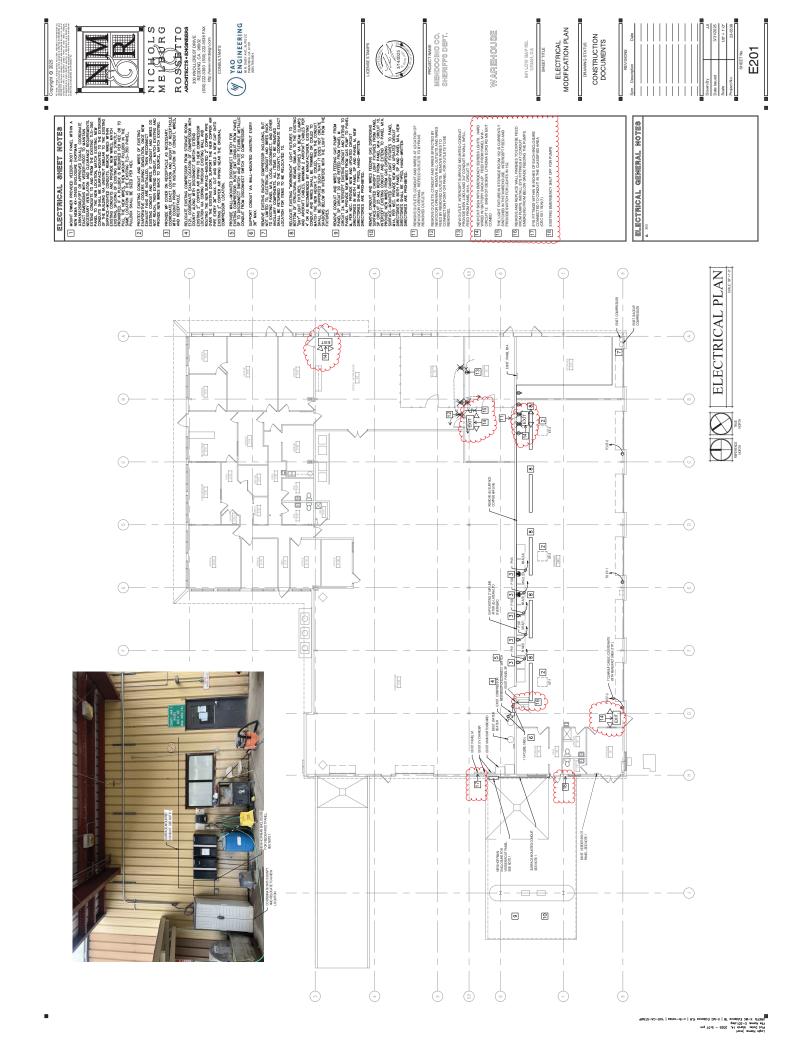
- A. Galvanized Coating.
- B. Accessories: Same finish as framing.

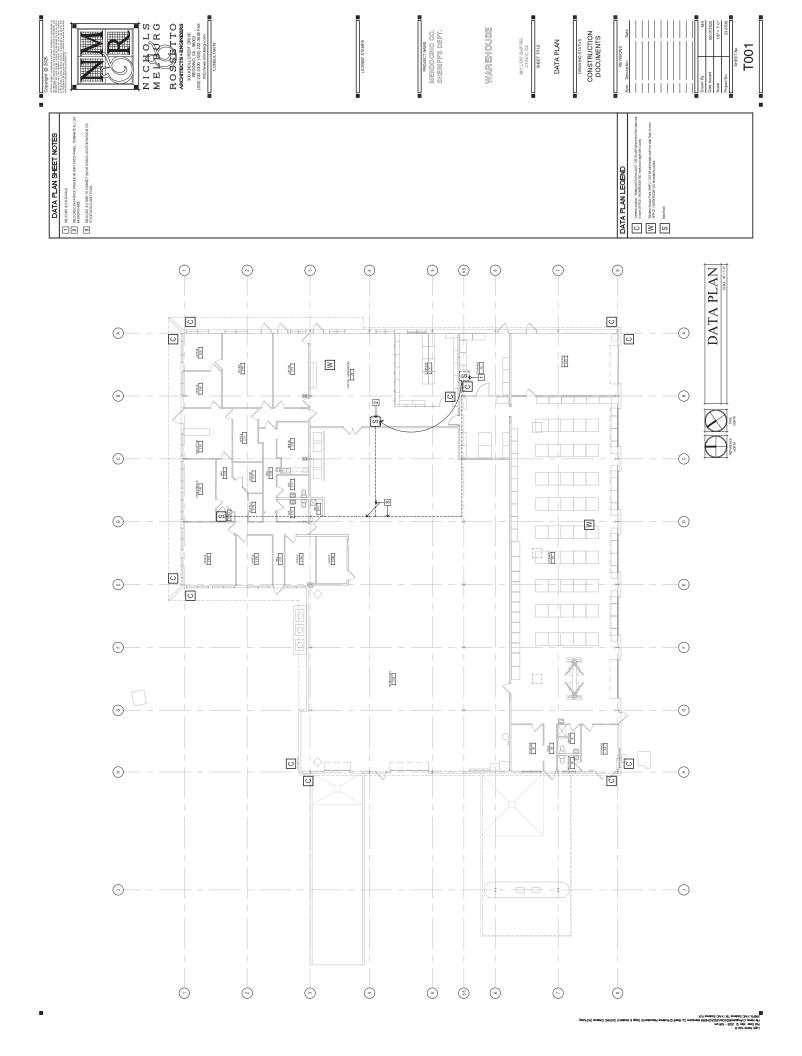
PART 3 EXECUTION

3.1 INSTALLATION

- A. Install framework, fabric, accessories and gates in accordance with ANSI/ASTM F567.
- B. Provide fence at heights noted on drawings.
- C. Space line posts at intervals not exceeding 10 feet. Set all posts as detailed in plans.
- D. Set terminal gate and posts plumb, in concrete footings with top of footing 2 inches below finish grade.
- E. Provide top rail through line post tops and splice with 7 inch long rail sleeves.
- F. Brace each gate and corner post back to adjacent line post with horizontal center brace rail and diagonal truss rods. Install brace rail, one bay from end and gate posts.
- G. Install center and bottom brace rail on all corner leaves, gate leaves, and at all 10 foot high fences.
- H. Stretch fabric between terminal posts or at intervals of 100 feet maximum, whichever is less.
- I. Position bottom of fabric 2 inches above finished grade.
- J. Fasten fabric to top rail, line posts, braces, bottom rail and bottom tension wire with wire ties maximum 15 inches on centers.
- K. Attach fabric to end, corner, and gate posts with tension bars and tension bar clips.
- L. Install bottom tension wire stretched taut between terminal posts typical at all 6 foot high fences. Install bottom rail at all fences greater than 8 feet high.
- M. Install gates with fabric to match fence. Install all gate hardware required for complete operable and lockable installation.
- N. Provide concrete center drop to foundation depth and drop rod retainers at center of double gate openings.

END OF SECTION





MENDOCINO COUNTY Facilities & Fleet Division

Pre-Bid Site Walk Attendance Sheet

For Mendocino County Sheriff's Warehouse Project Bid # 015-25

May 12, 2025 1:pm.

	-										 <i></i>	-	-
	Email	707 596 7575 into edmit builders corp. com	Bridges Construction 200 349 1731 valentin & Construction, con	bryon coastalmed	JPYCAlKirBy.cow	707-852-5046 Josie@ng builders. Le	407) 480-810 P Stark OMA-11:xhg Inc. com	707)337-7812 C Raynol Jo () matrix haine, con	707 443 6000 WILL & GCG-CINC. COM	Landrew (0) es. hvac.com			
	Phone #	707 546 1575	(801 848 000	7073501321	727-889-1378	707-852-5046	1012) 480-840 P	2/84-725(404)	707 443 6000	707-484-938			
	Company	DMR Builders	Bridges Construction	sames Dey/Construction Des Coostal Mountain Electric 707 350 1321 grail. com	Kirby Constaction	Kriodmo) ist ist 20	MatrixItb	MATON HB	ACGC	TES			
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	Print Name	Jr Da Silva	Valentin Rives	Bryan Mann	Zeke Hart	Josie Marrufo	John Stark	ChArtie Layno US	Kewin Scheffler	Dak Andrew			

SECTION 00 00 20

PROJECT DIRECTORY

PROJECT: Mendocino County Sheriff's Department Warehouse Project

841 Low Gap Road Ukiah, CA 95482

OWNER: County of Mendocino

851 Low Gap Road Ukiah, CA 95482 (707) 234-6050

AGENT: County of Mendocino

Executive Offices

Facilities and Fleet Division

851 Low Gap Road Ukiah, CA 95482 Office: (707) 234-6058 Mobile: (707) 380-3223

vierak@mendocinocounty.gov

Kirk Viera, Facility Project Specialist I

ARCHITECT: Nichols, Melburg, & Rossetto

Architects & Engineers 300 Knollcrest Drive Redding, CA 96002

Kyle Matti – Principal Architect

(530) 222-3300

matti@NMRDesign.com

SECTION 00 00 50

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END OF SECTION

SECTION 00 02 00

NOTICE INVITING BIDS

Notice is hereby given that sealed bids will be received at the Mendocino County Conference Room located at 841 Low Gap Road, Ukiah, California 95482 until the hour of 2:00 p.m., as determined by the clock on the wall in the Conference Room on **May 22, 2025** and then publicly opened and read aloud in the Conference Room, 841 Low Gap Road, Ukiah, California for the following project:

Mendocino County Sheriff's Department Warehouse Project (BID# 015-25)

Electronic Plans and Documents may be seen or downloaded from the Mendocino County Web Page for Open RFP, Quotes & Bids: https://www.mendocinocounty.org/departments/general-services/central-services/open-rfp-quotes-bids. Additionally plans and documents have been distributed to builder's exchange plan rooms throughout Northern California.

Bids shall be made on the form provided in this Manual and accompanied by a form of bid security as provided in Section 001000 Instructions to Bidders.

The successful Bidder will be required to furnish a Labor and Material Bond, and a Performance Bond as required in Section 001000 Instructions to Bidders.

Bidders' attention is called to Instruction to Bidders and other related documents in this Manual for full directions and information as to bidding and other requirements.

MANDATORY PRE-BID CONFERENCE

A mandatory pre-bid conference and site inspection will be held on:

Wednesday, May 13, 2025, at 1:00 pm at 841 Low Gap Road, Ukiah, CA 95482

PAYMENT OF PREVAILING WAGES

Pursuant to the provisions of the Labor Code of the State of California, the Department of Industrial Relations has made a determination of the rate of per diem wages to be paid on the prevailing rate of pay for regular, holiday and overtime work in the locality in which the public work is to be performed, for each craft, classification, or type of workman needed to execute the contract. All County of Mendocino projects greater than \$1,000 require that contractors adhere to Prevailing Wage requirements (California Labor Code, Sections 1770 through 1775). The rates can be found online here: https://www.dir.ca.gov/OPRL/DPreWageDetermination.htm.

CONTRACTOR REGISTRATION

Per Labor Code Section 1771.1(a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

CERTIFIED PAYROLL RECORDS

Per Labor Code Section 1776 each contractor and subcontractor shall keep accurate payroll records. A certified copy of all payroll records for work performed under this contract shall be furnished upon request to a representative of the awarding body. Per SB 854 contractors and subcontractors are required to furnish certified payroll reports directly to the Department of Industrial Relations.

EMPLOYMENT OF APPRENTICES

Each contractor and subcontractor performing work in an apprenticeable craft or trade shall comply with Section 1777.5 relating to Apprentices on public works projects.

MENDOCINO COUNTY BUSINESS LICENSE

Pursuant to Mendocino County Code Chapter 6.04 – Business Licenses, at the time of contract award, the contractor shall supply a copy of their current County of Mendocino business license.

LAWS AND GOVERNANCES

In the performance of the work contemplated by this contract, the contractor shall conform to and abide by all labor requirements and provisions of State and Federal Laws and City and County Ordinances and Regulations which may in any manner affect those engaged or employed on the work project, including but not limited to the overtime provisions of the Labor Code section 1813 and 1815 of the State of California.

Federal Laws, including The Davis-Bacon Act and The Americans with Disabilities Act of 1990, are applicable to the project.

END OF SECTION

SECTION 00 10 00

INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.1 BIDS RECEIVED

- A. Sealed bids for the Mendocino County Sheriff's Department Warehouse Project (Bid# 015-25) will be received at the Mendocino County Facilities Conference Room, 841 Low Gap Road, Ukiah, California, until 2:00 p.m. as determined by the clock on the wall of the Conference Room, on May 22, 2025 and then publicly opened and read aloud in the Conference Room, 841 Low Gap Road, Ukiah, California.
- B. Late bids will not be accepted. It is Bidder's responsibility to ensure that its bid is delivered and received at the location noted above or before the date and time set for the bid-
- opening.

LICENSE REQUIREMENT

The license required for this Project is a General B Building.

1.3 BIDS AND BID SECURITY

Bids, to be considered, must be in accordance with the following instructions:

- A. Bids must be submitted on the bid form provided in this Manual, properly and completely filled out with numbers stated both in writing and in figures and with signatures of all persons signing in longhand/cursive.
- B. The completed form shall be without erasures or interlineation and shall not contain recapitulations of the work to be done.
- C. A Bidder's Bond, Certified Check or Cashier's Check made payable to the County of Mendocino for an amount equal to at least ten percent (10%) of the bid amount shall accompany each bid. The above-mentioned bid security shall be given as a guarantee that the Bidder shall execute the contract if it is awarded to it in conformity with the contract documents and shall provide the surety bond or bonds required, sign the contract and commence work as set forth in the contract documents. Such guaranty to be forfeited should the Bidder to whom the contract is awarded fail to enter into the contract.
- D. Responsive Bids shall include completed and executed copies of the following sections if included in the project Manual:
 - a. 001200 Qualification Application
 - b. 003070 Non-Collusion Affidavit
 - c. 003100 Bid Form
 - d. 004300 Subcontractor Listing Form

1.4 SUBCONTRACTORS LISTED

- A. In accordance with California Public Contract Code Sections 4100 et seq., inclusive, each bidder shall provide a list of subcontractors (Section 004300), giving the name and location of place of business and contractor's license number of each subcontractor who will perform a portion of the contract work in an amount in excess of one-half of one percent (0.5%) of the total contract price. In each instance, the nature and portion of the work to be subcontracted shall be described.
- B. Failure of Bidder to specify a subcontractor for any portion of the work in an amount in excess of one-half of one percent (0.5%) of the total contract price constitutes an agreement for Bidder to perform that portion of the work itself. After bids are opened, no subcontractor may be designated or substituted except as provided for in Sections 4107 et seg. of the Public Contract Code.
- C. All Bidders must supply with their Bids with the required information on all subcontractors who will perform any portion of the work including labor, rendering of service or specially fabricating and installing a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in excess of one-half of one percent (0.5%) of total bid. Violation of this requirement may result in Bid being deemed non-responsive and not being considered.

1.5 AWARD OR REJECTION OF BIDS

The contract shall be awarded to the lowest responsible bidder complying with these instructions, provided the bid is deemed reasonable and in the best interest of the County of Mendocino. The County reserves the right to reject any and all bids, and to waive any informality on bids received whenever the rejection or waiver is in the best interest of the County. The competency and dependability of the bidders will be considered when making the award.

- A. Additive and Deductive Items: Method of Determining Lowest Bid. Pursuant to Public Contract Code section 20103.8, if this bid solicitation includes additive and/or deductive items, the checked [X] method shall be used to determine the lowest bid: [check one].
- [X] 1. The lowest bid shall be the lowest bid price on the base bid contract without consideration of the prices on allowance, additive or deductive items.
 - 2. The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items that were specifically identified in the bid solicitation or Bid Form as being used for the purpose of determining the lowest bid price.
 - 3. The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items taken in order from a specifically identified list of those items that, when in the solicitation, and added to, or subtracted from, the base contract, are less than, or equal to, a funding amount publicly disclosed by the County before the first bid is opened.
 - 4. The lowest bid shall be determined in a manner that prevents any information that would identify any of the bidders or the proposed Subcontractors or suppliers from being revealed to the public entity before the ranking of all bidders from lowest to highest has been determined.

If no method is checked, sub-paragraph 1. shall be used to determine the lowest bid.

- B. Notwithstanding the method used by the County to determine the lowest responsible bidder, the County retains the right to add to or deduct from the contract any of the additive or deductive items included in the bid solicitation.
- C. The award of the contract, if awarded, is expected to be made within thirty (30) days and in no event any later than eighty (80) days after the bid opening. After the award, County shall notify the successful Bidder in writing, and forward with the notification original contracts for Bidder's execution. Within eight (8) working days after such notification, the successful Bidder shall return the signed contracts to County, accompanied by all required Surety Bonds, insurance policies and endorsements.

1.6 TIME OF COMPLETION

Bidder agrees to commence work on or before a date to be specified in the written "Notice to Proceed" from County and to fully complete the project within sixty (60) calendar days from date of the written "Notice to Proceed".

1.7 ADDENDUM

Any addendum issued during the time of bidding and before bid opening shall be included in the bid. The addendum issued by the County shall become part of the agreement. Questions to be considered for inclusion in an addendum must be in writing and in the hands of County not less than seven (7) days prior to bid opening date.

1.8 INTERPRETATION OF DRAWINGS AND DOCUMENTS

Should a Bidder find discrepancies in, or omissions from, the drawings or documents, or should it be in doubt as to their intent, it should at once notify County, which will then send responsive written instructions in the form of addenda to all Bidders. The county will not be responsible for any oral instructions. Any verbal conversations with County during the bidding period are not to be construed as instructions. Any changes in the Contract documents will be issued by written addendum only.

1.9 WITHDRAWAL OF BID

Bids may be withdrawn prior to, but not later than, the time of the bid opening.

1.10 BONDS

Successful Bidder is required to furnish a Labor and Material Payment Bond and a Performance Bond each in the amount equal to one hundred percent (100%) of the contract price. Said Bonds shall be obtained from a surety company satisfactory to County.

1.11 SUBSTITUTIONS

Any substitution shall be made in accordance with instructions contained in Section 00700 – General Conditions included herein. Questions concerning substitutions will not be entertained during the bidding period.

1.12 SUBSTITUTION OF SECURITY

Pursuant to California Public Contract Code Section 22300, the Contractor may substitute securities for retention money withheld by the County to insure performance under the Contract. Said securities shall be in the form and of the type acceptable to the County.

1.13 LIQUIDATED DAMAGES

In case of failure on the part of Contractor to complete the work within the time stipulated plus any duly authorized extension of time granted in writing by County, Contractor shall pay to County the sum of \$250.00 per calendar day for each day's delay beyond the time prescribed as liquidated damages, but not as a penalty. The language in the paragraph of the General Conditions entitled "Time of Completion and Liquidated Damages" is incorporated herein.

1.14 BIDDER'S QUALIFICATIONS

- A. All Bidders, Contractors and Subcontractors bidding under joint venture agreements shall be duly licensed as provided for under Sections 7000 et seq. of the Business and Professions Code.
- B. A corporation which is awarded the Contract will be required to furnish certification attesting to its corporate existence, as well as evidence that the Officer signing the contract is duly authorized to do so.
- C. Bidders and their subcontractors may be required to furnish evidence satisfactorily to County that they have sufficient means and have had experience in the class of work called for to enable them to complete the contract in a satisfactory manner.
- D. No person, firm or corporation shall make or file or be interested in more than one bid for the same work, except insofar as alternate bids may be called for. No person, firm or corporation shall submit a collusive or sham bid or seek directly or indirectly to induce any other bidder to submit a collusive or sham bid or to refrain from submitting a bid or to seek in any way to control or fix the price of the bid or any portion of the bid price in order to secure an advantage against County or any other person interested in the proposed contract. However, a person, firm or corporation submitting a sub-proposal to a bidder or quoting prices on materials to a bidder is not hereby disqualified from submitting subproposals or quoting prices to other bidders.
- E. A licensed contractor shall not submit a bid to a public agency unless (1) its contractor's license number appears clearly on the bid, (2) the license expiration date is stated, and (3) the bid contains a statement that the representations made therein are made under penalty of perjury. Any bid not containing this information, or a bid containing information which is subsequently proven false, shall be considered non-responsive and shall be rejected by County.
- F. The work to be performed under this contract is of a very specialized nature. It is the desire of the County to secure the best work attainable and to maintain a very critical and condensed schedule. Bidders considered for the award will be limited to those firms who can show to the satisfaction of County that they have the facilities and experience necessary to perform the required construction in accordance with specifications proposed for this project. The terms under which bidders will be evaluated and the rules that will be applied are attached to this Manual as section 00120 Qualification Application.

1.15 EXAMINATION OF SITE AND DOCUMENTS

By submitting a bid, Bidder agrees and warrants that (1) it has examined the site and all documents, drawings and specifications; (2) it is satisfied that the same are adequate to produce the required results; and (3) its bid covers the cost of all items required in the agreement. The work to be performed includes all of the items mentioned in these specifications and/or as shown on the plans and other documents included as a part of the project.

1.16 ENVIRONMENTAL AND PLANNING CONDITIONS OF APPROVAL

Bidder agrees to perform its work in conformance with all environmental and planning conditions of approval applicable to the project. Bidders' attention is directed to specification section 00801 Supplementary General Conditions and the source documents for specific conditions of approval

1.17 AGREEMENT

Contract documents include the Agreement which the successful Bidder, as Contractor, will be required to execute.

1.18 PRE-CONSTRUCTION CONFERENCE

The successful bidder shall be available for a pre-construction conference with County at a mutually convenient time.

1.19 WORK PERFORMED WITHIN COUNTY SHERIFF'S OFFICE FACILITIES

All employees of the Contractor and all subcontractors working within the Mendocino County Sheriff's Office Warehouse site will be required to clear a background check by the Mendocino County Sheriff's office. At least fourteen days prior to the start of work, the contractor is required, for each employee, to submit the employee's Name, Date of Birth, Social Security Number and Driver's License state and number. Only those employees clearing the Sheriff's Department background check will be permitted on the project site.

END OF SECTION

SECTION 00 12 00

QUALIFICATION APPLICATION

The information contained in this Application is confidential and is for the sole use of County in evaluating the qualifications of Bidder. Only the information below ("Contact Information") is considered public information.

CONTACT INFORMATION
Firm Name (as it appears on license): The Constal Mountain Flectric Check one: Corporation Partnership Sole Proprietor
Contact Person: Bygan Maun
Address: 14832 Larkoshava Dx Cloarlaka, CA 95422
Phone: 707-994-0437 Fax:
If the firm is a sole proprietor or partnership:
Owner(s) of Company:
Contractor's License Number(s):
License No. Classifications Expiration Qualifying Individual
507105 B1C-10 3/3/27 Jon Rosgis, David Rosgis
DIR Registration Number: 100008522
Mendocino County Business License No: _ \ 2 5547

PART I. ESSENTIAL REQUIREMENTS FOR QUALIFICATION

The Contractor will be immediately disqualified if the answer to any of questions 1 through 3 is "no". The Contractor will be immediately disqualified if the answer to any of questions 4 through 7 is "yes"¹. 1. Contractor possesses a valid and current California Contractor's license for the project or projects for which it intends to submit a bid. ☐ Yes □No 2. Contractor has a liability insurance policy with a policy limit of at least one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) aggregate. Yes □ No 3. Contractor has a current workers' compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code Section 3700 et seq. Yes □No Contractor is exempt from this requirement because it has no employees Has Contractor's license been revoked at any time in the last five (5) years? 4. ☐ Yes □No 5. Has a surety firm completed a contract on Contractor's behalf, or paid for completion because Contractor's firm was default terminated by the project owner within the last five (5) years? ☐ Yes □ No 6. At the time of submitting this qualification form, is Contractor's firm ineligible to bid on or be awarded a public works contract, or perform as a subcontractor on a public works contract, pursuant to either Labor Code Section 1777.1 or Labor Code Section 1777.7? Yes ☐ No If the answer is "yes", state the beginning and ending dates of the period of debarment: 7. At any time during the last five (5) years, has Contractor's firm, or any of its owners or officers, been convicted of a crime involving the awarding of a contract of a government construction project, or the bidding or performance of a government contract? ☐ Yes □ No ORGANIZATION, HISTORY, ORGANIZATIONAL PERFORMANCE, PART II. COMPLIANCE WITH CIVIL AND CRIMINAL LAWS A. Current Organization and Structure of the Business For firms that are corporations: 1a. Date incorporated: Under the laws of the State of: 1b.

Warehouse Project Mendocino County

¹A contractor disqualified solely because of a "yes" answer given to questions 4,5, or 7 may appeal the disqualification and provide an explanation of the relevant circumstances during the appeal procedure.

1c.	corporatio	n (president, vice	formation for each perse president, secretary, prporation's stock:						
Name		Position	Years with Co.	% Ownership	Social Security #				
Ivallic		FOSITION	rears with Co.	70 Ownership	Social Security #				
For firr		partnerships: rmation:							
1b.		laws of the State							
1c.	Provide al	ll of the following	information for each pa	artner who owns ter	percent (10%) or				
	more of th		'		1 (-)				
		T =	1		T				
Name		Position	Years with Co.	% Ownership	Social Security #				
For firr 1a. 1b.	Date of co	sole proprietorsh ommencement of curity number of c							
B.	History of the Business and Organizational Performance								
2.	Has there been any change in ownership of the firm at any time during the last three (3) years? NOTE: A corporation whose shares are publicly traded is not required to answer this question. Yes No								
	If "yes", ex	xplain on a separ	ate signed page.						
3.	NOTE: In or more of	clude informati	rent, holding company, on about other firms an owner, partner, or er firm.	if one firm owns fir	fty percent (50%)				
	If "yes", explain on a separate signed page.								

4.	Are any corporate officers, partners, or owners connected to any other construction firms?					
	NOTE: Include information about other firms if an owner, partner, or officer of Contractor's firm holds a similar position in another firm. Yes No					
	If "yes", explain on a separate signed page.					
5.	Financial Statements: Does the Contractor have reviewed or audited financial statements for each of the last three years? Yes No					
6.	State Contractor's firm's gross revenues for each of the last three (3) years:					
Year	Gross Revenue					
7.	How many years has Contractor's organization been in business in California as a contractor under its present business name and license number? years.					
8.	Is Contractor's firm currently the debtor in a bankruptcy case? ☐ Yes ☐ No					
	If "yes", please attach a copy of the bankruptcy petition, showing the case number, and the date on which the petition was filed.					
Dispute	es es					
9.	At any time in the last five (5) years, has Contractor's firm been assessed and paid liquidated damages after completion of a project under a construction contract with either a public or private owner? Yes No					
	If "yes", explain on a separate signed page, identifying all such projects by owner, owner's address, the date of completion of the project, amount of liquidated damages assessed, and all other information necessary to fully explain the assessment of liquidated damages.					
10.	In the last five (5) years, has Contractor's firm, or any firm with which any of Contractor's company's owners, officers or partners was associated, been debarred, disqualified, removed or otherwise prevented from bidding on, or completing, any government agency or public works project for any reason? NOTE: "Associated with" refers to another construction firm in which an owner, partner or officer of Contractor's firm held a similar position. Yes No					
	If "yes", explain on a separate signed page. State whether the firm involved was the firm applying for qualification here or another firm. Identify by name of the company, the name of the person within Contractor's firm who was associated with that company, the year of the event, the owner of the project, the project, and the basis for the action.					
11.	In the last five (5) years, has Contractor's firm been denied an award of a public works contract based on a finding by a public agency that Contractor's company was not a responsible bidder?					

	☐ Yes ☐ No
	If "yes", explain on a separate signed page. Identify the year of the event, the owner, the project, and the basis for the finding by the public agency.
NOTE:	The following two questions refer only to disputes between Contractor's firm and the owner of a project. The Contractor need not include information about disputes between its firm and a supplier, another contractor, or subcontractor. Contractor need not include information about "pass-through" disputes in which the actual dispute is between a subcontractor and a project owner. Also, Contractor may omit reference to all disputes about amounts less than \$50,000.
12.	In the last five (5) years, has any claim <i>against</i> Contractor's firm concerning the firm's work on a construction project been <i>filed in court or arbitration</i> ? Yes No
	If "yes", on separate signed sheets of paper identify the claim(s) by providing the project name, date of the claim, name of the claimant, a brief description of the nature of the claim, the court in which the case was filed, and a brief description of the status of the claim (pending or, if resolved, a brief description of the resolution).
13.	In the last five (5) years, has Contractor's firm made any claim against a project owner concerning work on a project or payment for a contract and <i>filed that claim in court or arbitration</i> ? Yes No
	If "yes", on separate signed sheets of paper identify the claim by providing the project name, date of the claim, name of the entity (or entities) against whom the claim was filed, a brief description of the nature of the claim, the court in which the case was filed, and a brief description of the status of the claim (pending or, if resolved, a brief description of the resolution).
Crimina	al Matters and Related Civil Suits
14.	Has Contractor's firm or any of its owners, officers or partners ever been found liable in a civil suit or found guilty in a criminal action for making any false claim or material misrepresentation to any public agency or entity? Yes No
	If "yes", explain on a separate signed page, including who was involved, the name of the public agency, the date of the investigation and the grounds for the finding.
15.	Has Contractor's firm or any of its owners, officers or partners ever been convicted of a crime involving federal, state, or local law related to construction? ☐ Yes ☐ No
	If "yes", explain on a separate signed page, including who was involved, the name of the public agency, the date of the conviction and the grounds for the conviction.
16.	Has Contractor's firm or any of its owners, officers or partners ever been convicted of a federal or state crime of fraud, theft, or any other act of dishonesty? ☐ Yes ☐ No

If "yes", identify on a separate signed page the person(s) convicted, the court (the county if a state court, the district or location if a federal court), the year, and the criminal conduct.

17.	If Issued a Notice of Award, can the contractor secure payment and performance bonds within ten (10) calendar days? ☐ Yes ☐ No
	Name of Bonding Company:
	Name, Address, Telephone# for Surety Agent:
C.	Compliance with Occupational Safety and Health Laws and with Other Labor Legislation Safety
18.	Has Cal-OSHA cited and assessed penalties against Contractor's firm for any "serious", "willful", or "repeat" violations of its safety or health regulations in the last five (5) years? NOTE: If Contractor has filed an appeal of a citation, and the Occupational Safety and Health Appeals Board has not yet ruled on your appeal, Contractor need not include information about it. Yes No
	If "yes", attach a separate signed page describing the citations, including information about the dates of the citations, the nature of the violation, the project on which the citation(s) was/were issued, and the amount of the penalty paid (if any). If the citation appealed to the Occupational Safety and Health Appeals Board and a decision has been issued, state the case number and the date of the decision.
19.	Has the Federal Occupational Safety and Health Administration cited and assessed penalties against Contractor's firm in the last five (5) years? NOTE: If Contractor has filed an appeal of a citation and the Appeals Board has not yet ruled on the appeal, or if there is a court appeal pending, Contractor need not include information about the citation. Yes \text{No}
	If "yes", attach a separate signed page describing each citation.
20.	Has the EPA or any Air Quality Management District or any Regional Water Quality Control Board cited and assessed penalties against either Contractor's firm or the owner of a project contracted to Contractor in the last five (5) years? NOTE: If Contractor has filed an appeal of a citation and the Appeals Board has not yet ruled on the appeal, or if there is a court appeal pending, Contractor need not include information about the citation. Yes No
	If "yes", attach a separate signed page describing each citation.
21.	How often does Contractor require documented safety meetings to be held for construction employees and field supervisors during the course of a project?
22.	List Contractor's Experience Modification Rate (EMR) (California's Workers' Compensation insurance) for each of the past three (3) premium years:

NOTE: An Experience Modification Rate is issued to Contractor annually by its

SECTION 00 30 60

ANTITRUST CLAIM ASSIGNMENT

Pursuant to California Labor Code Section 7103.5, the following certification is hereby set forth and made a part of these specifications:

In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.

SECTION 00 30 70 NON-COLLUSION AFFIDAVIT

In accordance with California Public Contract Code Section 7106, the following affidavit must be completed by the Bidder:

Non-Collusion Affidavit to be executed by Bidder and submitted with bid

State of California County of Mendocino

Warehouse Project Mendocino County

Date Received 5/22/25

Date Opened
Initials

SECTION 00 31 00

BID FORM

RECEIVED

Mendocino County Sheriff's Department Warehouse Project

MAY 22 2025

FOR MENDOCINO COUNTY

County of Mendocino General Services Agency Facilities and Fleet Division

TO: Honorable Board of Supervisors

It is understood that this bid is based upon completion of the work within the time of completion requirements contained in the Instructions to Bidders.

It is agreed that this bid may not be withdrawn for a period of eighty (80) days from the opening hereof.

The undersigned has carefully checked all its figures and understands that the County will not be responsible for any error or omissions on the part of the undersigned in making up this bid.

If awarded the Contract, the undersigned agrees to complete the Work, one hundred fifty (60) calendar days from the date of Notice to Proceed.

The undersigned, having become completely familiar with all conditions affecting the cost of the work at the place where the work is to be done, and with the drawings, specifications and other contract documents prepared and issued thereof and now on file at the Facility and Fleet Division office, hereby proposes and agrees to perform everything required to be performed, and to provide and furnish any and all required labor, materials, equipment, transportation and services necessary to erect and complete in the best workmanlike manner, all as shown and specified.

The following bid amounts are as defined and clarified in the Bids Required portion of these specifications:

BASE BID:

Two hundred twenty four thousand six hundred thirty nine and no/100

Dollars (\$224,639.00)

SALES TAX

All bids shall include the required California State Sales Tax, cost of all bonds and insurance as required and all other items of expense incidental to the contract. The County of Mendocino is exempt from Federal Excise Tax.

A licensed Contractor shall not submit a bid to a public agency unless its Contractor's License number appears clearly on the bid, the license expiration date is stated, and the bid contains a statement that the representations made therein are made under penalty of perjury. Any bid not containing this information, or a bid containing information which has subsequently proven false, shall be considered nonresponsive and shall be rejected by the public agency.

Name of Organization James Day Construction, Inc.

Warehouse Project Mendocino County Bid Form 00 31 00 - 1

Name of Organization James They Construction, Inc
do Coastal Moontain Electric
Type of Organization (Corporation, Partnership, etc.)
Address 14832 lakosharo Dr Claurlako, CIA 95422
Name of State where incorporated California
CONTRACTORS LICENSE NO. 507105 EXPIRATION DATE 33127
The contractor has registered with the State of California's DIR (Department of Industrial Relations) website.
DIR Registration #: \\\ \(\)00008527
Contractor is currently licensed to do business in the County of Mendocino.
Mendocino County Business License #: 125547
ADDENDA: CONTRACTOR TO ACKNOWLEDGE RECEIPT
I have received the following Addenda pertaining to this project and they have been included as part of my bid.
Numbers: 01-May 19, 2025
The undersigned hereby certifies under penalty of perjury that this bid is genuine and not collusive, that all the information is correct and that he/she has carefully checked all of the above figures and understands that the County will not be responsible for any errors or omissions on the part of the undersigned on making up this bid.
Signature In Page

SECTION 00 43 00

SUBCONTRACTORS LISTING FORM

MENDOCINO COUNTY SHERIFF'S DEPARTMENT WAREHOUSE PROJECT

In accordance with the provisions of Section 4100 *et seq.* of the Public Contract Code of the State of California, each bidder shall list below the name, license number, Department of Industrial Relations (DIR) Registration Number, and location of place of business of each subcontractor who will perform a portion of the contract work in an amount in excess of one-half of one percent (0.5%) of the total contract price. In each such instance, the nature and portion of the work to be subcontracted shall be described.

CONTRACT LIC.

SUBCONTRACTOR'S NAME

		DIR REG #	
LIV/AC	All In Heating and Cooling	1082921	Redwood Valley Ca
HVAC	7 th in Floating and Cooling	2000008826	,
Fence	Arrow Fence	585041	
rence	7416W 1 61166	1000022055	Redwood Valley Ca
	*		

PORTION OF WORK



Bid Bond

KNOW ALL MEN BY THESE PRESENTS, tha	t we James Day Construction, Inc. dba Coastal Mountain Electric
14832 Lakeshore Drive, Clearlake, CA 95422	
Quailbrook Drive, Oklahoma City, OK 7313 as Surety, hereinafter called the Surety, are he	nd Granite Re, Inc. DBA Granite Surety Insurance Company, 14001 4, a corporation duly organized under the laws of the State of Minnesota eld and firmly bound unto
County of Mendocino	j
851 Low Gap Road, Ukiah, CA 95482	
	he sum of **** Ten Percent of Bid Amount (10%) **** made, the said Principal and the said Surety, bind ourselves, our heirs, signs, jointly and severally, firmly by these presents.
WHEREAS, the Principal has submitted a bid	for
Project: Mendocino County Sheriffs Wareho	ouse Project, Bid #015-25
Bid Date: 05/22/2025	
within such time period as may be agreed to by the Obligee in accordance with the terms of such bid Documents, with a surety admitted in the jurisdiction of such Contract and for the prompt payment of lad difference, not to exceed the amount of this Bond Obligee may in good faith contract with another par otherwise to remain in full force and effect. The Surextend the time in which the Obligee may accept the	igee accepts the bid of the Principal within the time specified in the bid documents on the Obligee and Principal, and the Principal either (1) enters into a contract with the did, and gives such bond or bonds as may be specified in the bidding or Contract of the Project and otherwise acceptable to the Obligee, for the faithful performance bor and material furnished in the prosecution thereof; or (2) pays to the Obligee the did between the amount specified in said bid and such larger amount for which the ty to perform the work covered by said bid, then this obligation shall be null and void rety hereby waives any notice of an agreement between the Obligee and Principal to bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty ceptance of bids, and the Obligee and Principal shall obtain the Surety's consent for
this Bond conflicting with said statutory or legal r	a a statutory or other legal requirement in the location of the Project, any provision in equirement shall be deemed deleted herefrom and provisions conforming to such med incorporated herein. When so furnished, the intent is that this bond shall be in law bond.
Signed and sealed this 05/22/2025	
	James Day Construction, Inc. dba Coastal Mountain Electric
Sunn Sann	gu Ray
Witness Witness	Granite Re, Inc. DBA Granite Surety Insurance Company
= O:CAI	Kenneth D. Whittington, Attorney-in-Fact (SEAL)

GR0614-2-CA

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of the document.

ACKNOWLEDGMENT OF PRINCIPAL

State of	California	
County of	Lake	

On this A day of MOU, 2025, before me Susun ESOM, Dotw.

Here insert Name and Title of Officer

SUSAN E. STONE ary Public - California Commission # 2396572 Comm. Expires Apr 6. 2026

, who proved to me on the basis of satisfactory evidence to be the person

whose name is subscribed to the within instrument and acknowledged to me that/ne)she executed the same in/nis/her authorized capacity, and that by his her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

> I certify under the PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

ACKNOWLEDGMENT OF SURETY

State of Oklahoma County of Oklahoma

On this 22 day of May, 2025 before me personally come(s) Kenneth D. Whittington, Attorney-in-Fact of Granite Re, Inc. DBA Granite Surety Insurance Company with whom I am personally acquainted, and who, being by me duly sworn, says that he reside(s) in Oklahoma City, Oklahoma that he is the Attorney-in-Fact of Granite Re, Inc. DBA Granite Surety Insurance Company, the company described in and which executed the within instrument; that he know(s) the corporate seal of such Company; and that the seal affixed to the within instrument is such corporate seal and that it was affixed by order of the Board of Directors of said company, and he signed said instrument as Attorney(s)-in-Fact of the said Company by like order.

GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY GENERAL POWER OF ATTORNEY

Know all Men by these Presents:

That GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY, a corporation organized and existing under the laws of the State of MINNESOTA and having its principal office at the City of OKLAHOMA CITY in the State of OKLAHOMA does hereby constitute and appoint:

KENNETH D. WHITTINGTON; KYLE MCDONALD its true and lawful Attorney-in-Fact(s) for the following purposes, to wit:

To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said:

KENNETH D. WHITTINGTON; KYLE MCDONALD may lawfully do in the premises by virtue of these presents.

In Witness Whereof, the said GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its President and Assistant Secretary, this 31st day of July, 2023.

STATE OF OKLAHOMA)

SS:

COUNTY OF OKLAHOMA)

SEAL

Kenneth D. Whittington, President

Kyle P McDonald Assistant Secreta

On this 31st day of July, 2023, before me personally came Kenneth D. Whittington, President of the GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY and Kyle P. McDonald, Assistant Secretary of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said, that they, the said Kenneth D. Whittington and Kyle P. McDonald were respectively the President and the Assistant Secretary of GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY, the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their name thereto by like order as President and Assistant Secretary, respectively, of the Company.

My Commission Expires: April 21, 2027 Commission #: 11003620 ST COS

Buthamy & alled Notary Public

GRANITE RE, INC. Certificate

THE UNDERSIGNED, being the duly elected and acting Assistant Secretary of GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY, a Minnesota Corporation, HEREBY CERTIFIES that the following resolution is a true and correct excerpt from the July 15, 1987, minutes of the meeting of the Board of Directors of GRANITE RE, INC. DBA GRANITE SURETY INSURANCE COMPANY and that said Power of Attorney has not been revoked and is now in full force and effect.

"RESOLVED, that the President, any Vice President, the Assistant Secretary, and any Assistant Vice President shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

IN WITNESS WHEREOF, the undersigned has subscribed this Certificate and affixed the corporate seal of the Corporation this

May 22, 2025.



Kyle P. McDonald, Assistant Secretary

SECTION 00 50 10

WORKERS' COMPENSATION CERTIFICATION

Pursuant to California Labor Code Section 1861, the Contractor hereby certifies the following:

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

Dated:	 	
Contractor Signature_		

SECTION 00 51 00

CONTRACTOR GUARANTEE

Mendocino County Sheriff's Department Warehouse Project

The contractor hereby guarantees that the labor and material furnished for this project is in accordance with the drawings, specifications, and applicable building codes. Contractor agrees to repair or replace any or all of the work, together with any other adjacent work which may be displaced in so doing, that may prove to be defective in its workmanship or material within a period of ONE (1) YEAR from date of acceptance of the above-named project by County without any expense whatsoever to County, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of Contractor's failure to comply with the above-mentioned conditions within fifteen (15) calendar days after being notified in writing by County, Contractor authorizes County to proceed to have said defects repaired and made good at Contractor's expense. The Contractor shall honor and pay the costs and charges therefore upon demand.

SIGNED
COUNTERSIGNED
CONTRACTOR
DATED
DATE OF BUILDING ACCEPTANCE

SECTION 00 70 00

GENERAL CONDITIONS

1. DEFINITIONS

Whenever in the Specifications and other Contract Documents the following abbreviations and terms are used, the intent and meaning shall be interpreted as follows:

- A. "Owner" Board of Supervisors, County of Mendocino, or its authorized agents or assignees.
- B. "Agent" The Agent acting for the County, which shall be either the County General Services Agency Director or his/her designee, or the County Executive Officer or his/her designee.
- C. "Contractor" The person or persons, partnership, corporation, or combination thereof, private or municipal, who have entered into a contract with the County, as party or parties of the second part or his/her or their legal representatives.
- D. "Specifications" The directions, provisions and requirements contained in these Specifications as supplemented by the Supplementary Conditions. Whenever the term "These Specifications" is used in this book, it means the provisions as set forth in this book.
- E. "Paragraph" The particular section of subdivision herein designated by a number.
- F. "Laboratory" The designated laboratory authorized by the County to test materials and work involved in the Contract.
- G. In the case of conflict between the Standard Specification and these Specifications, these Specifications shall take precedence over and be used in lieu of such conflicting portions:
- H. The County and the Contractor are those named as such in the Agreement. They are treated throughout the Contract Documents as if each were of the singular number and the masculine gender.
- I. When the words "Approved", "Satisfactory", or "Equal", "As Directed", etc. are used, approval by the County is understood.
- J. All Federal, State laws and local laws shall govern the construction of the Contract, and all rules, ordinances and requirements of authorized officials shall be complied with.
- K. It is understood that any reference to the Specifications or designation of the American Society for Testing Materials, Federal Specifications or other standard, code, or order, refers to the most recent or latest amended specification or designation.

2. EXAMINATION OF PLANS AND SPECIFICATIONS

The Bidder shall examine carefully the site of the work contemplated and the proposal, plans, specifications, and Contract forms thereof. It will be assumed that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and material to be furnished, and as to the requirements of these Specifications.

3. DRAWINGS AND SPECIFICATIONS

- A. Figured dimensions on the drawings shall govern but work not dimensioned shall be as directed. Work indicated but not particularly detailed or specified shall be equal to similar parts that are detailed or specified, or as directed. Full-size detailed shall take precedence over scale drawings as to shape and details of construction. It is intended that scale drawings, full-size details and specifications should agree but should any discrepancy or apparent error occur in plans and specifications, or should any work of others affect this work, the Contractor shall notify the County at once; if the Contractor proceeds with the work affected without instruction from the County, he shall make good any resultant damage or defect.
- B. All misunderstandings of drawings or specifications shall be clarified by the County, whose decision shall be final.
- C. Any work called for by the drawings and not mentioned in the Specifications, or vice versa, is to be furnished as though fully set forth by both. Where not specifically stated otherwise, all work and materials necessary for each unit of construction, including special construction for any specific brand or shape of material called for even though only briefly mentioned or indicated, shall be furnished and installed fully and completely as a part of the Contract.
- D. Lists, rules and regulations referred to are recognized printed standard and shall be considered as one and a part of these Specifications within the limits specified.
- E. "General Conditions" apply with equal force to all of the work, including authorized extra work.
- F. For convenience, the Technical Specifications are arranged in Divisions and further divided into various sections. It is to be understood; this separation is for the convenience of all parties involved and is not to be considered as the limits of the work required of any separate trade. The terms and conditions of such limitations are wholly between the County and the Contractors during bidding and construction phases, i.e., all work shown, as well as for the proper completion of the project as a whole, shall be coordinated by the Contractor and his Subcontractors during bidding and construction and shall be provided in this Contract.

4. CONDUCT OF WORK

- A. The County reserves the right to do other work in connection with the project by contract or otherwise. The contractor shall at all times conduct his work so as to impose no hardship on the County or others engaged in the work. The contractor shall adjust, correct, and coordinate his work with the work of others so that no discrepancies shall result in the whole work.
- B. The Contractor shall provide at his own cost and risk all labor, material, water, power tools, machinery, scaffolding, and framework for the execution of the work. Equipment should be adequate and as approved.

The Contractor shall obtain all necessary measurements from the work and shall check dimensions, levels, and construction and layout and supervise the construction, for correctness of all of which he shall be responsible.

- C. Where work of one trade joins or is on other work, there shall be no discrepancy when same is completed. In engaging work with other materials, marring or damaging same shall not be permitted. Should improper work of any trade be covered by another which results in damage or defects, the whole work affected shall be made good without expense to the County.
- D. The Contractor must anticipate relation of all parts of the work and at the proper time furnish and set anchorage, blocking or bonding as required. Anchorage and blocking necessary for each trade shall be a part of same, except were stated otherwise.
- E. Assistance required by the County in obtaining measurements or information on the work shall be furnished accurately and fully without cost to the County.

5. OWNERSHIP OF DRAWINGS

All plans and specifications shall remain the property of the County and shall be returned to the office of the County Facilities and Fleet Division Manager or shall be accounted for by the Contractor before the final certificate will be issued.

6. PUBLIC AND COUNTY CONVENIENCE AND SAFETY

The Contractor shall furnish, erect, and maintain such fences, barriers, lights and signs as are necessary to give adequate warning to the public at all times and of any dangerous conditions until final acceptance of the work by the County.

7. ACCIDENT PREVENTION

- A. It shall be the Contractor's responsibility to keep himself fully informed of all existing and future safety regulations, Codes, OSHA requirements, and other laws and regulations governing the work which may in any manner affect anyone in and around the project or engaged or employed in the work, or materials, equipment, etc. used in the work or which in any way affect the conduct of the work.
- B. The Contractor shall appoint a Safety Officer for the project and submit his name to the County.
- C. The Contractor shall supply the County with a Material Safety Data Sheet (MSDS) on each hazardous substance to be used by the Contractor on the project.
- D. The Contractor and his Safety Officer shall be solely responsible for ensuring compliance with those Codes, regulations, OSHA requirements, and for discovering and correcting any code violations or unsafe conditions.
- E. Reports of all lost-time accidents shall be promptly submitted to the Owner, giving all pertinent information.

8. RESPONSIBILITY FOR DAMAGE

The County shall not be answerable or accountable in any manner for: (1) any loss or damage that may happen to the work or any part thereof, for any loss or damage to any of the materials or other things used or employed in performing the work; (2) injury to or death of any person or persons, either workers or the public; (3) damage to property from any cause which might have been prevented by the Contractor or his workers or anyone employed by him. The Contractor shall be responsible for any liability imposed by law for injuries to or death of any person including, but not limited to, workers and the public or damage to property resulting from defects or obstructions or from any cause whatsoever during the progress of the work or at any time before its completion and final acceptance. The Contractor shall indemnify, save harmless and defend the County of Mendocino, its elected or appointed officers, agents, employees or volunteers connected with the work, from all claims or actions for injuries or death of any person, or damage to property, resulting from the Contractor's performance of the Contract. With respect to third party claims against the Contractor, the Contractor waives any and all rights to any type of express or implied indemnity against the County of Mendocino, its elected or appointed officers, agents, employees or volunteers.

In addition to any remedy authorized by law, so much of the money due the Contractor under and by virtue of the Contract as shall be considered necessary by the County may be retained by the County until disposition has been made of such suits or claims for damages as aforesaid.

9. LAWS TO BE OBSERVED

The Contractor shall keep himself fully informed of all existing and future State, Federal and local laws, codes and regulations which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies and tribunals having any jurisdiction or authority over the same and shall be solely responsible for insuring compliance with those laws, codes and regulations.

A partial, though not necessarily complete listing of laws to be observed by the Contractor is as follows:

- A. Federal Americans with Disabilities Act of 1990.
- B. Federal Labor Standards Act.
- C. The Anti Kick-Back regulations found in 29 CFR Part 3.
- D. All contract clauses required by 29 CFR 5.5 (a) and (c), 20 U.S.C. 1232b; 40 U.S. C. 276a, 276c, 327-332; 29 CFR Parts, (926).
- E. Nondiscrimination clause and Certification of Non-Segregated Facilities prescribed by Executive Order No. 11246, September 24, 1965, as amended by Executive Order 11375.
- F. Executive Order No. 11288 of July 7, 1966 (31 FR 9261) "Prevention, Control and Abatement of Water Pollution".
- G. Executive Order 11988, relating to evaluation of flood hazards.
- H. Compliance with all Federal, State and local requirements for handicapped access, fire safety and seismic resistance.

10. BONDS REQUIRED

The successful bidder shall furnish bonds as required in the document entitled "Instructions to Bidders" which is part of these Contract documents.

11. INSURANCE

The Contractor, at his expense, shall secure and maintain at all times during the entire period of performance under this Contract, insurance as set forth below with insurance companies acceptable to the County of Mendocino.

The Contractor shall provide to the County of Mendocino certificates of insurance with endorsements properly executed by an officer or authorized agent of the issuing insurance company evidencing coverage and provisions as stated below:

A. INSURED

Name the County of Mendocino, its elected or appointed officials, employees, agents and volunteers as additional insured with regard to damages and defense of claims arising from: (a) activities performed by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, (c) Premises owned, leased or used by the Named Insured, or (d) Ownership, operation, maintenance, use, loading or unloading of any vehicle owned, leased, hired or borrowed by the Named Insured, regardless of whether liability is attributable to the Named Insured or a combination of the Named Insured and the County of Mendocino, its elected or appointed officials, employees, agents and volunteers.

B. SEVERABILITY OF INTEREST

Provide that the inclusion of more than one named insured shall not operate to impair the rights of one insured against another insured, and the coverages afforded shall apply as though separate policies had been issued to each insured.

C. CONTRIBUTION NOT REQUIRED

Provide that as respects: (a) work performed by the Named Insured on behalf of the County of Mendocino; or (b) products sold by the Named Insured to the County of Mendocino; or (c) premises leased by the Named Insured from the County of Mendocino; or (d) ownership, operation, maintenance, use, loading or unloading of any vehicle owned, leased, hired or borrowed by the Named Insured, the insurance afforded by this policy shall be primary insurance as respects the County of Mendocino, its elected or appointed officials, employees, agents and volunteers; or stand in an unbroken chain of coverage excess of the Named Insured's scheduled underlying primary coverage. In either event, any other insurance maintained by the County of Mendocino, its elected or appointed officials, employees, agents and volunteers shall be excess of this insurance and shall not contribute with it.

D. COVERAGE BELOW MINIMUM REQUIRED NOTICE

Provide that the limits of insurance afforded by this policy shall not fall below the minimum requirements of the County of Mendocino without notice to the County of Mendocino by certified mail return receipt requested. Such notice shall be addressed to: County of Mendocino, 501 Low Gap Road, Ukiah, Calif. 95482, Attn: Risk Management.

E. CANCELLATION NOTICE

Provide that the insurance afforded by this policy shall not be suspended, voided, canceled, non-renewed or reduced in coverage or in limits except after thirty (30) day's prior written notice, delivered in person or by First Class U.S. Mail, has been given to the County of Mendocino. Such notice shall be addressed to: County of Mendocino, 841 Low Gap Road, Ukiah, Calif. 95482, Attn: Risk Management.

The contractor shall furnish the County of Mendocino certificate(s) of insurance evidencing Workers Compensation Insurance coverage to cover its employees. The Contractor shall require all subcontractors similarly to provide Workers Compensation Insurance as required by the Labor Code of the State of California for all of the Contractor's and subcontractors' employees.

The Contractor shall not commence work, nor shall he allow his employees or subcontractors or anyone to commence work until all insurance required and provisions contained herein have been submitted to and accepted by the County of Mendocino. Failure to submit proof of insurance as required herein may result in awarding said Contract to another bidder. Failure to comply with the insurance requirements set forth herein shall constitute a material breach of contract and, at County of Mendocino's option, shall subject this Contract to termination.

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor for liability in excess of such coverage, nor shall it preclude the County of Mendocino from taking such other action as is available to it under any other provisions of this Contract or otherwise in law.

SCOPE OF LIABILITY COVERAGES

The contractor shall furnish to the County of Mendocino certificates of insurance evidencing at the minimum the following:

1. Public Liability-Bodily Injury (not auto) \$500,000 each person; \$1,000,000 each accident,

and

Public Liability-Property Damage (not auto) \$500,000 each occurrence; \$1,000,000 aggregate.

---or---

Combined Single Limit Bodily Injury Liability and Property Damage Liability (not auto) \$1,000,000 each occurrence.

2. Vehicle-Bodily Injury \$500,000 each person, \$1,000,000 each occurrence,

and

Vehicle-Property Damage \$1,000,000 each occurrence.

---or---

Combined Single Limit Vehicle Bodily Injury and Property Damage Liability \$1,000,000 each occurrence.

12. WORKERS COMPENSATION CERTIFICATION

Contractor certifies as follows:

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Workers Compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this Contract". (Labor Code Section 1861)

13. CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the formal acceptance of the work by the County, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof or to materials or things employed in doing the work or stored on the site by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, replace, and make good all injuries or damages to any portion of the work occasioned by any of the above caused before final acceptance and shall bear the expense thereof, except such injuries or damages occasioned by acts of the Federal Government or the public enemy. The Contractor's responsibility also extends to adjoining property as related to the construction operation.

14. RESPONSIBILITY OF COUNTY

The County shall not be held responsible for the care or protection of any material or parts of the work prior to final acceptance, except as expressly provided in these Specifications.

15. COOPERATION BETWEEN CONTRACTORS

Where two or more contractors are employed on related or adjacent work, each shall conduct his operations in such a manner as not to cause any unnecessary delay or hindrance to the other. Each contractor shall be responsible to the other for all damage to work, to person or property, or for loss caused by failure to furnish the work within the time specified for completion.

Should the Contractor, through acts of neglect on the part of any Contractor, suffer loss or damage to the Work, the Contractor agrees to settle with such other Contractor by agreement. If such other Contractor should file claim against the County on account of alleged damages to be sustained, the County shall notify the Contractor who shall, at his expense, indemnify and save harmless the County against any such claim.

16. SUBCONTRACTING AND ASSIGNMENT

The Contractor shall give his personal attention to the fulfillment of the Contract and shall keep the work under his control. Should the Contractor subcontract any part of his Contract, the Contractor shall be fully responsible to the County for the acts and omissions of his subcontractor and of the persons either directly or indirectly employed by the subcontractor as he is for the acts and omissions of persons directly employed by himself.

No subcontractor will be recognized as such, and all persons engaged in the work on construction shall be considered as employees of the Contractor.

17. PERMITS AND LICENSES

The Contractor shall procure all permits and licenses, pay all charges and fees, and file all notices necessary and incidental to the due and lawful prosecution of the work.

18. PATENTS

The Contractor shall assume all responsibilities arising from the use of patented materials, equipment, devices or processes used on or incorporated in the work.

19. LIENS

Liens shall be enforced as provided by California State Law pertaining to Public Works.

20. CHANGES IN THE WORK

- A. The County may order changes in the work, in which event the Contract sum shall be adjusted by one or more, or a combination of, the following methods:
 - 1. Unit bid prices previously approved or as may be agreed upon.
 - 2. An agreed lump sum substantiated by Contractor, itemizing labor, material, equipment, overhead, profit, bond, etc.
 - 3. By ordering Contractor to proceed with work and keep correct account with vouchers the actual cost of:
 - a. Labor, including foreman.
 - b. Materials entering permanently into the work.
 - The ownership or rental cost of construction plant and equipment during the time of use on the extra work.
 - d. Power and consumable supplies for the operation of power equipment.
 - e. Insurance.
 - f. Social Security and old age and employment contribution.
- B. To the cost under (2) and (3), there may be added a fixed fee to be agreed upon but not to exceed fifteen percent (15%) for the estimated cost of the work. The fee shall be compensation to cover the cost of administrative overhead, and profit.
- C. On changes which involve credit to the County, no allowances for overhead need be figured.
- D. All such change orders and adjustments shall be in writing. Claims by Contractor for extra cost shall be made in writing before executing the work involved.
- E. All change orders shall be reviewed and approved by the County.

21. COUNTY'S RIGHT TO TERMINATE CONTRACT

If the Contractor should refuse or neglect to properly perform or prosecute the work or if he should substantially violate any provision of the Contract, then the County may, without prejudice to any other right or remedy upon seven (7) days written notice to the Contractor, terminate the services of the Contractor and take possession of the premises, and all materials, tools, and equipment thereon and complete the work. The expense thereof shall be deducted from the balance otherwise due the Contractor. If such expense should exceed such unpaid balance, then the Contractor shall pay the difference to the County.

22. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If the work is stopped for a period of thirty (30) days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the work under a contract with the Contractor, or if the work should be stopped for a period of thirty (30) days by the Contractor because no certificate for payment has issued as provided in Paragraph 25 or because the County has not made payment thereon as provided in Paragraph 25, then the Contractor may, upon seven (7) additional days' written notice to the County, terminate the Contract and recover from the County payment for all work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery, including reasonable profit and damages.

23. TIME OF COMPLETION AND LIQUIDATED DAMAGES

- A. In case all the work called for under the Contract is not completed before or upon the expiration of the time limit as set forth in these specifications, damage will be sustained by the County, and it is impracticable to determine the actual damage which the County will sustain in the event of and by reason of such delay. It is therefore agreed that the Contractor will pay to the County the sum of money per calendar day for each day's delay beyond the time prescribed as required in the document entitled "Instructions to Bidders", which is a part of these Contract Documents. The Contractor agrees to pay such liquidated damages as herein provided, and in case the same are not paid, agrees that the County may deduct the amount thereof from any money due or that may become due the Contractor under the Contract.
- B. In case the work called for under the Contract is not finished and completed in all parts and requirements within the time specified, the County shall have the right to extend the time for completion or not, as may best serve the interest of the County. If the County decides to extend the time limit for the completion of the Contract, the County shall further have the right to charge the Contractor, his heirs, assigns or sureties, and to deduct from the final payment for the work, all or any part, as it may deem proper, of the actual cost of County, including inspections, superintendence, and other overhead expenses directly chargeable to the Contract, and which accrue during the period of such extension. The cost of final inspections shall not be included in such charges.
- C. The Contractor shall not be assessed with liquidated damages nor the cost of County's services and inspection during any delay in the completion of the work caused by acts of God or the public enemy, acts of the County, fire, flood, earthquake, epidemics, quarantine restrictions, strikes, freight embargoes, shortages of materials, labor, fixtures or equipment (provided the Contractor furnishes satisfactory and acceptable proof that he has made diligent attempts to obtain same) and unusually severe weather or delays of subcontractors due to such causes, provided the Contractor shall within ten (10) days from the beginning of such delay notify the County in writing of the delay. County's findings of fact thereon shall be final and conclusive.
- D. The County agrees that changes in work ordered pursuant to Paragraph 20 and extensions of completion time made necessary by reasons thereof, shall in no way release any guarantee given by the Contractor or the Contract let hereunder, nor shall such changes in the work relieve or release the sureties on bonds executed pursuant to these specifications. Sureties shall be deemed to have expressly agreed to any change in the work and to any extension of time made by reason thereof.

24. ACCEPTANCE

- A. The Contract will be accepted as completed only when the whole and entire Contract shall have been completed satisfactorily to the County. In judging the work, no allowance for deviations from the original plans and specifications will be made unless already approved in writing at proper times and in a manner as called for herein.
- B. Should it become necessary to occupy a portion of the work before the Contract is fully completed, such occupancy shall not constitute acceptance.

25. PARTIAL PAYMENTS

Prior to submitting and as a condition of approval of the first progress payment application, the Contractor shall submit a schedule of values acceptable to the County providing a breakdown of the contract value by trade division such that the County can accurately assess the percentage completion of the project.

On the twenty-fifth (25th) day of each month, the Contractor shall submit to the County an application for payment, on a form acceptable to the County, showing an itemized statement for work that has been performed on a percent complete basis based on the previously approved schedule of values. The County, within thirty (30) days of receipt of application that meets the County's approval shall issue to the Contractor a certificate for ninety percent (95%) of the amount the County finds due for work that has been performed.

The contractor shall submit certified copy of payroll showing payment of Davis-Bacon Act wages with each request for payment submitted.

26. FINAL PAYMENT

Upon completion of the Contract, the County will cause to be made a final estimate of the amount of work done, and the value of such work. After approval by the County representative, the County shall pay the remainder due on the contract (with the exception of retainage) after deducting there from, all previous payments. All amounts retained (retainage) under the provisions of the Contract shall be due and payable 30 days from the date of acceptance in writing of the completion of Contract and / or Notice of Completion issued by the County representative. All prior partial estimates and payments shall be subject to correction in the final estimate and payments. Payment and the final estimate is due within thirty-five (35) days from the recorded date of the Notice of Completion, provided all as-built drawings, equipment manuals, instructions to the owner and guarantees have been received and accepted by the County.

27. PAYMENT WITHHELD

The County may withhold or, on account of subsequently discovered evidence, may nullify the whole or part of any certificates to such extent as may be necessary to protect the County from (1) defective work not remedied, (2) asserted claims against Contractor, (3) failure of the Contractor to make payments properly to employees or for material or labor, (4) any reasonable doubt that the Contract work can be completed for the balance then unpaid, or (5) damage to another contractor.

28. FAULTY WORK AND MATERIALS

The Contractor shall promptly remove from the premises all materials condemned by the County as failing to conform to the Contract, whether incorporated in the work or not. The Contractor shall promptly replace and re-execute his own work in accordance with the Contract and without expense to the County. The Contractor shall bear the expense of making good all work of other contractors destroyed or damaged by such removal.

If the Contractor does not remove such condemned work and materials within reasonable time, fixed by written notice, the County may remove them and may store the materials at the expense of the Contractor. If the Contractor does not pay the expenses of such removal within ten (10) days thereafter, the County may upon ten (10) days written notice, sell such materials at auction or at private sales and shall account for the net proceeds thereof after deducting all costs and expenses that should have been borne by the Contractor.

29. TEMPORARY SUSPENSION OF WORK

The County shall have the authority to suspend the work wholly or in part, for such period as it may deem necessary, due to unsuitable weather or to such other conditions as are considered unfavorable for the suitable progression of the work, or for such time as it may deem necessary due to the failure of the Contractor to carry out orders given by County, or to perform any provision of the Contract. The Contractor shall immediately obey such order of the County and shall not resume work until ordered in writing by the County.

30. SAMPLES

When requested, the Contractor shall submit for the County's review samples of the various materials, together with the finish thereof, as specified for and intended for use in the work. Samples of bulk materials shall be selected by the lab. All materials and workmanship shall in all respects be equal to the samples submitted and reviewed. Samples shall be sent or delivered to the County, samples and delivery charges paid by Contractor. Samples will be returned to the Contractor if requested, shipping or delivery charges are collected.

31. CLEANING AND REMOVAL OF DEBRIS

The Contractor shall, as directed by the County during the progress of the work or as indicated elsewhere in these documents, remove and properly dispose of dirt and debris and shall keep the premises reasonably clean. Upon completion of the work, the Contractor shall remove all of his equipment and unused materials provided for the work and shall put the building and appurtenances in a neat and clean condition and shall do all cleaning and washing required by the specifications.

32. OBSTRUCTIONS

The Contractor may be required to work around public utility facilities and other improvements which are to remain in place within the construction area. The Contractor shall be held liable to the owners of such facilities and improvements for any damage or interference with service resulting from the Contractor's operation.

The exact location of underground facilities and improvements within the construction area, whether shown on the drawings or not, shall be ascertained by the Contractor before using equipment that may damage such facilities or interfere with their service.

33. SUPERINTENDENT IN CHARGE

The Contractor shall keep on the work at all times and until the acceptance certificate is issued a competent superintendent or foreman for the purpose of receiving and executing without delay any orders from County in keeping with the terms of the Contract. This foreman shall have charge of the plans and specifications kept on the job. He shall be instructed to familiarize himself closely with all provisions of the plans and specifications and to follow the same accurately.

34. STORAGE OF MATERIALS AND EQUIPMENT

Materials and equipment shall not be stockpiled or placed outside of the site property lines unless written permission is obtained by the appropriate owner or political subdivision having jurisdiction over the adjacent property, roads, streets, etc.

35. GENERAL GUARANTY

Neither the final payment nor any partial payment, nor partial or entire use of the premises by occupancy by the County shall constitute an acceptance of the work not completed in accordance with the Contract. Final Payment or partial payment or partial or entire use of the premises by occupancy shall not relieve the Contractor of liability with respect to any warranties or responsibilities for faulty materials or workmanship. The Contractor shall remedy any defect in the work and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from the date of final acceptance of the work, unless a longer period is specified elsewhere in these specifications. The County shall notify the Contractor of observed defects with reasonable promptness.

36. MATERIALS SUBMITTALS AND SUBSTITUTIONS

Materials and substitutions shall be governed by the relevant sections elsewhere in these documents. If not specified, the following shall govern.

- A. Specific reference to materials, appliances, fixtures and equipment by trade name is intended to be used as standard, but this implies no right on the part of the Contractor to use other materials, fixtures, appliances, equipment, until reviewed by the County.
- B. The County alone shall determine what will be considered as equal, but the burden of proof as to quality, utility and function, etc. shall be upon the Contractor.
 - If the Contractor desires to substitute any item, he shall in writing state the cost of such item and the original item named in the specifications if requested and shall <u>submit a substitution</u> warranty in the format shown in the specifications.
- C. As soon as practicable and within twenty (20) days after official award of Contract and before any fixtures, materials or equipment are purchased, the Contractor shall submit to the County a complete list of materials, fixtures and equipment giving the manufacturers' names, catalog numbers, etc., and, when requested, the original and substitute item of each article which he proposes to install as a substitution.
- D. Requests for substitution will not be considered after the above period of time unless the item specified is not obtainable or, in the opinion of the County, such substitution would serve the County's interest.

37. CONSTRUCTION, MATERIAL AND LABOR COST SCHEDULES

- A. The successful Contractor shall submit the following schedules to the County within ten (10) days after commencing the work:
 - 1. A construction schedule indicating the start and finish of each phase of the work.
 - 2. A detailed statement of the cost of material and labor included in the original estimate for each phase of the work so arranged that the value of the work as it progresses may be readily determined.

38. CONFERENCES

At any time during the progress of the work, the County may request the Contractor to attend a conference of any or all of the Contractors engaged on the work, and any notice of such conference shall be duly observed and complied with by the Contractor.

39. INSPECTION AND PAYMENTS - NOT ACCEPTABLE

The fact that the work and materials have been inspected by the County of Mendocino and payments on account have been made does not relieve the Contractor from the responsibility of replacing and making good any defective work or materials that may be discovered within one (1) year from the date of the completion of the work by the Contractor and its acceptance by the County. [Five (5) years for roof.]

40. RETURN OF DRAWINGS AND SPECIFICATIONS

All plans and specifications shall be returned to the Office of the County Director of General Services or shall be accounted for by the Contractor before the final certificate will be issued.

41. ARRANGEMENT OF SPECIFICATION SECTION

- A. For convenience, these specifications are arranged in several sections, but such separation shall not be considered as limiting any work required to a particular trade. The Contractor shall in cooperation with other contractors establish responsibility for any work required by the plans and specifications which may be improperly arranged or not included in the appropriate section.
- B. In areas where one trade meets another for joining, the Contractor is responsible to be certain that all work shown is included in his bid.

42. QUALITY OF MATERIALS AND LABOR

All materials used on this Contract shall be new and the best market quality, unless specified or shown otherwise. All labor used on this Contract shall be competent and skilled for the work. All work executed under this Contract shall be done in the best, most thorough, substantial and workmanlike manner.

All material and labor not meeting these standards shall be removed. The County may refuse to issue any certificate of payment until all defective materials or work have been removed, and other material of proper quality substituted therefor.

43. <u>INCOMPETENT WORKERS</u>

If at any time any foreman or worker who shall be employed by the Contractor shall be declared by the County to be incompetent or unfaithful in executing the work, the Contractor, on receiving written notice, shall forthwith initiate appropriate action to dismiss such person from the work.

44. COUNTY TO DECIDE

All matters of color, texture, design, interpretation of plans and specifications shall be referred by the Contractor to County, whose decision thereon shall be final.

45. CODES

All work and materials shall be in full accordance with the latest rules and regulations of the State Fire Marshal; the Safety Orders of the Division of Industrial Safety; the California Electric Code; the California Building Code; California Mechanical Code; the California Fire and Plumbing Codes; OSHA and other applicable State and local codes and laws. Nothing in these plans or specifications is to be construed to permit work not conforming to these Codes.

46. PAYMENT OF FEDERAL, STATE OR LOCAL TAXES

Any Federal, State or Local tax payable on articles furnished by the Contractor under the Contract shall be included in the Contract price and paid by the Contractor.

47. LIMITATIONS OF HOURS OF WORK

Eight (8) hours of labor constitutes a legal day's work. The Contractor shall forfeit as a penalty \$25.00 for each worker employed in the execution of the Contract by the Contractor for each calendar day which such worker is required or permitted to work more than eight (8) hours in one (1) calendar day and forty (40) hours in any one (1) calendar week in violation of the provisions of the California Labor Code, and in particular Sections 1810 and 1816. Work performed by employees of Contractors in excess of eight (8) hours per day and forty (40) hours during anyone (1) week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1 & 1/2) times the basic rate of pay, as provided in Section 1815.]

48. PAYMENT OF NOT LESS THAN THE GENERAL PREVAILING RATE OF PER DIEM WAGES

- A. The Contractor shall pay his workers on all work included in this Contract not less than the general prevailing rate of per diem wages for legal holiday and overtime work in said locality. Such per diem wages shall not be less than the stipulated rates contained in a schedule thereof which has been ascertained and determined by the State Director of Industrial Relations to be the general prevailing rate of per diem wages for each craft or type of worker needed to execute this Contract.
- B. The Contractor shall comply with Labor Code Section 1775. In accordance with Section 1775, the Contractor shall forfeit as a penalty twenty-five dollars (\$25.00) for each calendar day or portion thereof, for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed for any work done under the Contract in violation of the provisions of the Labor Code in particular Labor Code Sections 1770 and 1780. In addition to said penalty, and pursuant to Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

49. LABOR CODE CLARIFICATION

It is to be understood that references to the California Labor Code shall mean the current Code or as may be amended during the period of the Contract.

50. NOTIFICATION OF READINESS FOR REQUIRED TESTS AND INSPECTIONS

The Contractor shall be responsible to notify all inspectors, testing agencies, and County representatives a minimum of seventy-two (72) hours before required tests and/or inspections.

51. RESPONSIBILITY FOR PROJECT SAFETY AND CONSTRUCTION TECHNIQUES

Specifically omitted from the services of the County are all design and construction review services relating to the Contractor's safety precautions or to means, methods, techniques, sequences, or procedures required for the Contractor to perform his work.

Omitted services include, but are not limited to, shoring, scaffolding, underpinning, temporary retainment of excavations and any erection methods and bracing.

52. RECORD DRAWINGS

- A. The Contractor shall furnish one complete set of clean "Record" drawings to the County prior to project acceptance, showing clearly any changes made during construction. Record drawings shall be in accordance with Section 017839 Project Record Documents.
- B. In addition to any changes, all mechanical, electrical and plumbing items concealed in the building and underground, actually installed and routed. Depth below surface to top of underground item shall be indicated.
- C. All underground items shall be dimensioned from permanent reference points in a manner that they can be easily found in the field at a later time.
- D. <u>Each sheet</u> of the "Record" drawings shall be identified with the following label to be signed by the Contractor:

These are record drawir prepared or supervised	•
Contractor	Date

E. The Contractor is solely responsible for the preparation, completeness, and accuracy of the "Record" drawings. The County and its representatives are not responsible to review the "Record" drawings.

53. OCCUPANCY OR USE BEFORE ACCEPTANCE OF COMPLETION

The County may occupy any building or portion thereof or use any improvement contemplated by the Contract prior to the completion of the entire work. A list of work to be completed and corrected by the Contractor, if any, shall be prepared and agreed to between the County and the Contractor before occupancy or use. Such occupancy or use shall not operate as an acceptance of any part of the work but shall start the guaranty-warranty period on the structure or portion thereof so occupied or improvement of equipment so used, provided, however, that such occupancy shall not start the guaranty-warranty period as to items appearing on the list of work to be completed and corrected. No such occupancy or use shall be deemed to have occurred unless and until the County has given the Contractor formal written notice of intention to so occupy or use, specifying the portion or portions of the structure, improvement or equipment which will be deemed so occupied or used.

54. COMPLIANCE WITH HANDICAPPED ACCESS LAWS

A. It is the County's intent for all features on these plans and specifications to conform to applicable regulations for the accommodations of physically handicapped persons in buildings and facilities used by the public, whether or not said plans and specifications so conform.

- B. It shall be the responsibility of the manufacturers, suppliers and distributors to ensure that all manufactured and fabricated products, devices and items they supply for this project conform to applicable regulations of Title 24 of the California Code of Regulations.
- C. When shop drawings and/or manufacturers' product literature, and other matters subject to handicapped regulations are submitted to County, the following shall be provided:
 - 1. Statement that the item shown complies with the handicapped regulations of Title 24 of the California Code of Regulations.
 - 2. Show all required dimensions, heights, clearances, and locations that must be followed when items are installed on project.

55. CONTRACT AMBIGUITY

This Contract shall be deemed to have been prepared jointly by the parties signing the Contract and if any inconsistencies or ambiguities exist, they shall not be interpreted or construed against any of the parties as the drafter.

56. FAIR EMPLOYMENT PRACTICES/NONDISCRIMINATION

The Contractor shall comply with Federal and State Fair Employment Practices provisions.

The Contractor, in connection with performance of work under this agreement, agrees to comply with the rules and regulations which deal with or relate to nondiscrimination set forth as follows:

- A. During the performance of this Contract, the Contractor and its subcontractors shall not deny the Contract's benefits to any person on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex or age, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, age, or sex. The contractor shall ensure that the evaluation and treatment of employees and applicants for employment are free of such discrimination.
- B. The Contractor shall comply with the provisions of the California Fair Employment and Housing Act (Gov. Code, sections 12900 *et seq.*), the regulations promulgated thereunder (2 Cal. Code of Regulations sections 7285.0 *et seq.*), and Government Code Sections 11135 11139.5).
- C. The Contractor shall permit access by representatives of the Department of Fair Employment and Housing and the County upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours' notice, to view such of its books, records, accounts, other sources of information and its facilities as said Department or County shall require to ascertain compliance with this clause.
- D. The Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- E. The Contractor shall include the above nondiscrimination and compliance provisions in above subparagraphs A and B in all subcontracts to perform work under the Contract.

END OF SECTION

SECTION 00 81 10

UNFORESEEN PHYSICAL CONDITIONS

PART 1 - GENERAL

1.1 SUMMARY

This Section includes special requirements for unforeseen hidden conditions, differing site conditions and underground facilities as required for California Public Works Contracts.

1.2 UNFORESEEN SITE CONDITIONS

- A. Pursuant to Section 7104 of the California Public Contract Code, if any of the following conditions, hereinafter called hidden conditions, are encountered at the site, then Contractor shall promptly, before such conditions are disturbed and in no event later than three (3) days after discovery, notify County in writing using the "Hidden Conditions Report" attached to this Document:
 - Material that the Contractor believes may be hazardous waste material, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or a Class III disposal site in accordance with provisions of existing law.
 - 2. Subsurface or latent physical conditions at the site or in the building differing materially from those represented in the Contract Documents.
 - 3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents or conditions that could be observed by examination of the site and the Reference Documents.
- B. Conditions that are not unforeseen, hidden, unknown or differing site and building conditions include but are not limited to the following.
 - 1. All that is indicated in or reasonably interpreted from the Contract Documents.
 - 2. All that is indicated in or reasonably interpreted from the Reference Documents specified in Section 010100, "Summary of Work".
 - 3. All that could be seen on site and that could be observed.
 - 4. Conditions that are materially similar or characteristically the same.
 - 5. Conditions where the location of the building component is in proximity were indicated in or reasonably interpreted from the Contract Documents or Reference Documents.

- C. County will promptly investigate the conditions reported which appear to be unforeseen conditions.
 - If the County determines that the reported conditions are inherent in work of the character provided for in the Contract Documents or observed by examination of the site and Reference Documents, or that the condition is not hidden, unforeseen or materially different, Contractor shall execute the Work at no additional cost to County.
 - If County determines that the conditions are hidden or differing conditions and that
 they will materially cause a decrease or increase in Contractor's cost of any portion
 of the work, Contract Modification will be issued for compensation of such portion of
 the work as provided in the General Conditions.
 - 3. If the County determines that the conditions are hidden or differing conditions and that they will materially affect the performance time, the Contractor, upon submitting a written request, will be granted an extension of time subject to the provisions of the General Conditions.
 - a. Time extensions or contract costs will not be granted for delays that could be or could have been avoided by Contractor redirecting his forces and equipment to perform other work on the Contract.
 - D. Should Contractor disagree with County's determination, Contractor shall submit a Request for Change (RFC) to County that the condition is not indicated in or reasonably interpreted from the Contract Documents, and that the condition is not similar in character to the material that could have been observed by examination of the site and Reference Drawings, but that the condition is materially different and the condition is unforeseen and unknown.
 - 1. Contractor shall submit proof with written explanation, drawings, photographs, material and labor cost breakdowns, and other relevant data to show the condition.
 - 2. County will review Contractor's submission and make a determination. Contractor shall not file for claim or RFC before County makes the determination.
 - In the event of continued disagreement, Contractor shall not be excused from any scheduled completion date provided for by the Contract but shall proceed with all work to be performed under the Contract.
 - 4. Contractor shall retain any and all rights provided either by the Contract or by law which pertain to the resolution of RFC and protests between the contracting parties.

1.3 REMOVAL, RELOCATION, OR PROTECTION OF EXISTING UTILITIES

A. In accordance with the provisions of Section 4215 of the California Government Code, County will assume the responsibility for the removal, relocation, or protection of existing main or trunk-line utilities located on the site of the Contract work, if such utilities are not identified in the Contract Documents.

- B. Contractor shall immediately notify County and the public utility in writing of such utility facilities it discovers while performing the work which are not identified in the Contract Documents.
 - 1. Contractor shall negotiate with the owner of the utility, who shall have the sole discretion to perform repairs or relocation work or permit Contractor to do such repairs or relocation work at a reasonable price.
- C. Contractor shall not be assessed liquidated damages for delay in Substantial Completion if the delay was caused by such existing utilities in direct conflict with the work and not shown on the Drawings.
- D. Contractor will be compensated under the provisions of Article 7 for extra work involving existing utilities not shown on the Drawings or included in the Specifications but in direct physical conflict with Contractor's operations.
 - 1. This extra work shall include the following costs:
 - a. Locating, supporting, working around, and protecting or repairing damage not due to the failure of Contractor to exercise reasonable care.
 - b. Removing and relocating, as directed by County, existing main or trunk line utility facilities located on site but not indicated on the Drawings and Specifications with reasonable accuracy.
 - c. Equipment on the project necessarily idled during such work.
- E. Contractor shall not be entitled to any adjustment in the Contract Sum or Time if the existence of such condition:
 - Could have been reasonably discovered or revealed as a result of any examination, investigation, exploration, test or study of the site and contiguous areas required by the Contract Documents to be conducted by or for Contractor prior to commencing such work, or
 - 2. Could have been inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the work site.

PART 2 - PRODUCTS NOT USED

PART 3 - EXECUTION NOT USED

HIDDEN CONDITIONS REPORT (HCR)

Pre-Trial Release	Program Facility	HCR No.		
Submitted By:			_ Date:	
	Ctr to PM	PM to Arch	Arch to PM	PM to Ctr
Date Sent:				
Date Received:				
Type of Condition	s Reported:			
☐Site Work ☐Plumbing	☐Structural ☐Fire Protection	☐Architectural ☐Electrical	□HVAC □Other	
Location and Refe	erence to Drawing:			
	ted:			
Investigated By:		Firm:	Date	:
☐ Check this box	if the hidden condition	reported is not hidden.	Reply with location(s) where the
information can be	e obtained.			
Reply of Findings	:			
Ву:	Firm:	Date:		
	ding from the investigati			e is authorized. See
Specifications Do	cument 008110 for the t	imeliness of investigation	n.	

END OF SECTION

SECTION 00 85 10

DRAWINGS INDEX

Title: Mendocino County Sheriff's Department Warehouse Project

Issue Date: April 29, 2025

G001 TITLE SHEET / OVERALL SITE PLAN

A201 FLOOR PLAN A950 DETAILS

M101 MECHANICAL SCHEFULES AND DETAILS

M201 MECHANICAL DEMOLOTION PLAN
M202 MECHANICAL MODIFICATION PLAN

M301 MACHANICAL SCHEDULES AND DETAILS

E101 ELECTRICAL LEGEND

E201 ELECTRICAL MODIFICATION PLAN

E301 ELECTRICAL SCHEDULES AND DETAILS

END OF SECTION

SECTION 01 01 00

SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

- A. General Conditions and Division 1 General Requirements apply to the Work of all Sections.
- B. Contractor is hereby specifically directed to notify and apprise all subcontractors and other parties engaged in the Work as to the Contents of the General Conditions and Division 1 General Requirements.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work shall be performed at the Project site located in Mendocino County at 841 Low Gap Road, Ukiah, CA 95482.
- B. The Work of this Contract comprises the modification of the existing warehouse and garage for use by the Mendocino County Sheriff's Department per the project plans and specifications.

Scope of Work shall include but not be limited to:

- 1. Provide temporary security fencing as needed to isolate the work area from the facility operations.
- 2. The contractor is responsible for the security of the job site.
- 3. The contractor shall provide a proposed work schedule within two (2) weeks of receipt of the fully executed contract and no later than two (2) weeks prior to the proposed start of the work. Upon acceptance of the proposed work schedule, the County shall issue the Notice to Proceed for the date proposed by the Contractor for the start of the work.
- 4. Work shall be completed no more than sixty (60) calendar days after the Notice to Proceed date.
- 5. Provide all labor, material, and equipment to complete work as depicted in the drawings, as described in the project manual or as necessary for a complete and proper installation. The extent of the work as indicated in the Drawings and as described in the Specifications shall include all that may be reasonably inferred to be required for proper execution or installation of work. Present to the County, at the close of project, signed copies of all required permits indicating successful completion of all permit requirements.

- Should the General Conditions or Contract Documents contradict themselves, Contractor shall provide the more stringent or higher quality or quantity unless otherwise approved by County.
- 7. The Drawings shall be recognized as diagrammatic in nature and not completely descriptive of all requirements for construction. Whatever work may be specified, and not drawn, or drawn and not specified, is to be executed as fully as if described in both these ways; and should any workmanship or material be necessary which is not either directly or indirectly noted in these specifications, or shown on the Drawings, but is nevertheless necessary for the purpose of properly carrying out the obvious intention thereof, Contractor is to understand the same to be implied, and is to provide for the same in its bid, as fully as if it were particularly described or delineated

1.3 TYPE OF CONTRACT

- A. Contractor shall construct the Work under a single fixed-price Contract.
 - 1. Where the term "Contractor" is used in the Specification, the General Contractor is referred to.
 - 2. Where the terms "Plumbing Contractor," "Electrical Contractor," etc., are used, it has been for convenience only and in no way affects the overall responsibility of the General Contractor.

1.4 PRECEDENCE OF DOCUMENTS

- A. In the case of discrepancy or ambiguity in the Contract Documents the following order of precedence shall prevail:
 - 1. Modifications in inverse chronological order and in alphanumeric order.
 - 2. Signed Agreement and terms and conditions referenced in the Signed Agreement.
 - 3. Supplemental Conditions.
 - 4. General Conditions.
 - 5. Division 1 specifications.
 - 6. Drawings and Division 2 through 16 specifications.
 - 7. Written numbers and figures, unless obviously incorrect.
 - 8. Figured dimensions over scaled dimensions.
 - 9. Large format drawings over small-scale drawings.
- B. Any conflict between the Drawings and Division 2 through 16 specifications will be resolved in favor of the document of the latest date (i.e., the most recent document), and if the dates are not the same or are not determinable, then in favor of the specifications.

C. Any conflict between a bill or list of materials shown in the Contract Documents and the actual quantities required to complete the Work required, then the actual quantity shall take precedence.

1.5 1.5 USE OF PREMISES

- A. General: Comply with requirements in General Conditions and Section 015000.
- B. Area available for Contractor's use for work and storage, if any, is limited to the area designated by the County. The project site is adjacent to the Mendocino County Jail Expansion project site that includes active construction operations. The contractor shall coordinate with the jail project contractor to ensure both projects proceed expeditiously.
- C. Work to be performed is within a secure Mendocino County Sherrif's Department Warehouse facility; all access must be coordinated with facilities and Sherrif's staff. Prior to beginning work on the site, the contractor shall provide the county with the names of all personnel who will be working on the site including name, address, date of birth and SSN for background check and approval by the Sheriff's Office. Only those employees clearing the Sheriff's Department background check will be permitted on the jail site.
- D. The building functions as an active working warehouse and office areas for Sheriff's staff and others. Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
 - 1. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - 2. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- E. Fire Department Access: Contractor's use of premises shall not limit required Fire Department access.

1.6 EXAMINATION

- A. General: As stipulated in Document 001000 Instructions to Bidders, Contractor is responsible for inspection of the existing site conditions and bidding documents prior to bidding and shall include in their bid any modifications of the Contract Documents required as a result of Contractor's inspection.
- B. Persons performing work shall examine conditions that affect their work and shall report in writing to Contractor, with a copy to County, conditions detrimental to work.
 - 1. Failure to examine and report makes the person responsible, at no increase in the Contract Sum, for corrections necessary for the proper installation of their work.
 - 2. Commencement of Work constitutes acceptance of existing conditions.
- C. Field Verification: Contractor shall verify all existing conditions in the field prior to commencing the Work.

1.7 PERMITS FOR WORK

The Contractor is responsible for fulfilling all permit requirements for the completion of the work.

1.8 LISTING OF RELATED WORK

Listings of related work or sections in the various Sections are not necessarily complete listings. They are provided for information and convenience only and are intended to highlight related or similar work which is specified in other Sections. Related work listings and omissions from such listings are not intended to control Contractor in dividing the work among subcontractors or in establishing the extent of the work to be performed by any trade.

1.9 REQUEST FOR INFORMATION (RFI)

- A. Requirement: It is the Contractor's responsibility to review Contract Documents a minimum of Fifteen (15) days in advance of the work to be executed, and to request information so that the County will have sufficient time to respond to Requests for Information prior to the start of actual construction of that part of the Work to which the RFI relates. The contractor shall be responsible for all delays, disruptions and other related impacts as a result of untimely RFI's submitted to County.
- B. Contractor shall coordinate all requests for information to prevent duplication. Requests for information that are duplicative, uncoordinated with each other, or do not allow for a reasonable time for response will be returned to Contractor.
 - 1. Contractor shall promptly notify County in writing of any discrepancies and shall not proceed with the Work until such discrepancies have been resolved.
 - 2. Failure to notify County shall not relieve Contractor of its responsibility for resulting damage and/or defect, and for the cost of any corrective work that may be required due to Contractor's failure to notify.
- C. Contractor shall prioritize RFI's and request a response based on its most current and accepted CPM schedule.

D. Form:

- 1. When an interpretation or clarification of the Contract Documents is required from County, Contractor shall make the request on a copy of the RFI form included in the end of this section or reasonable facsimile thereof.
- 2. Contractor shall fill in all applicable information on the form.
- 3. Contractor shall limit the subject to one design discipline to expedite reply and attach supplementary information where necessary.
- 4. County will reply or give summary of reply on the same form and include supplementary information where necessary.
- 5. The completed form shall be the written record of each RFI.
- 6. Contractor shall not use any other RFI form on this Project.

E. Uses:

1. The RFI form shall be used for interpretation or clarification of the Contract Documents only.

- 2. Contractor shall not use the RFI form for the following: County will not reply and will reject the RFI:
 - a. Product or material substitution.
 - b. Questions relating to construction means, methods, techniques, sequences, procedures or safety precautions. (These are Contractor's responsibilities exclusively.)
 - c. Questions relating to construction schedule, coordination between trades, or division of work among subcontractors. (These are also Contractor's responsibilities exclusively.)
 - d. Questions on contract administration procedural matters, unless they require interpretation or clarification of the Contract Documents.
 - e. Dimensions or quantities which are shown on the Contract Documents, or which can be measured from the building, or calculated from the information contained in the Contract Documents.
 - f. Confirmation of interpretations or clarifications previously provided by County.

F. Reply:

- 1. County will endeavor to reply to all RFI's promptly as work schedule of the consultants allows; generally, no later than fifteen (15) days from the day received.
- 2. When an RFI involves a complex subject, extensive research or development, or substantial input from other governmental agencies, County will inform the Contractor and request additional time to prepare the reply. The contractor shall cooperate and agree to a reasonable time extension.
- 3. The reply shall be a clarification or an interpretation of the Contract Documents; the reply is not an authorization of change in the Contract Sum or Time.
- 4. Such written interpretation or clarification will be binding on Contractor and County. If County or Contractor believes that a written interpretation or clarification justifies an adjustment in the Contract Sum or Time, then County or Contractor may make a written request for change therefor as provided in the General Conditions, Article 1.07.

PART 2 - PRODUCTS NOT USED

PART 3 - EXECUTION NOT USED

END OF SECTION

REQUEST FOR INFORMATION (RFI)

Mendocino County Sherrif's Department Warehouse Project

RFI No.						
Submitted By:		Date:				
	Ctr to PM	PM to Arch	Arch to PM	PM to Ctr		
Date Sent:						
Date Received:						
Type of Information	Requested:					
Site Work Plumbing	☐ Structural ☐ Fire Protection	Architectural Electrical				
Spec. Section:	Paragrapl	n(s):				
Drawing Sheet:	Detail(s):					
	sted:					
μ Mark this circle if t	he RFI can be answered by	/ Contractor's review of	the documents. Re	ply with location(s)		
	on can be obtained.					
Reply:						
			5.			
	Firm:					
The reply is a clarific	cation or an interpretation of	i trie Contract Documei	ils. No change in th	e Contract Sum or		

The reply is a clarification or an interpretation of the Contract Documents. No change in the Contract Sum or Time is authorized. The Contractor shall notify the County in the event the Contractor believes the response to the RFI will result in additional costs. The Contractor shall comply with the requirements of Article 2.06 and 2.07 of the General Conditions regarding notice and submittal of an RFC. See Specification Section 01010 for the timeliness of reply.

SECTION 01 50 00

TEMPORARY FACILITIES & BUILDING SERVICES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide temporary facilities and controls needed for the Work included, but not necessarily limited to:
 - 1. Temporary utilities such as water, electricity, lighting and telephone.
 - 2. Temporary building services such as electricity, gas, heating and cooling or telephone and data when interruption in services is required to complete the work.
 - 3. Sanitary facilities.
 - 4. Provide security enclosures and temporary protection such as fencing, tarpaulins, barricades and canopies so as not to create a safety or security risk.

B. Related work:

1. Documents affecting the work of this Section include, but are not necessarily limited to, Project Plans, General Conditions, Supplementary conditions, and Sections in Division 1 of these Specifications.

1.2 JOB SAFETY

- A. Safety is the top priority at the Mendocino County Sheriff's Department Warehouse project. Comply with all applicable laws and regulations pertaining to job safety, and be solely responsible for construction means, methods, techniques, sequences procedures and safety precautions and programs in connection with the Work. Owner or Architect will not be responsible for Contractor's failure to employ proper safety procedures.
- B. All work, including the temporary construction, shall be in full accord with the latest orders, rules and regulations of the State of California Division of Industrial Safety and the California Occupational Safety and Health Act (CAL-OSHA).
- C. The Contractor shall at all times conduct his work as to cause the least possible obstruction and inconvenience and ensure the protection of persons and property in the vicinity of the Work.

PART 2 - PRODUCTS

2.1 MISCELLANEOUS FACILITIES

- A. Construction Aids: Hoists, ramps and ladders, enclosures, pumps, barriers, fences, barricades necessary to adequately move materials and equipment and to protect workmen and public.
- B. All temporary construction and protection are to comply with security requirements of Mendocino County Sheriff's Department.
- C. Sanitary Facilities
 - 1. Provide and pay for temporary sanitary facilities in quantity required for use by all personnel
 - 2. Shall be maintained in a sanitary condition at all times.
 - 3. Facility shall remain locked when Contractor is off-site.

PART 3 - EXECUTION

3.1 EXISTING BUILDING SERVICES

- A. Utilities: Coordinate the temporary shut off of any utilities including water, electricity, gas, and sanitary sewer with the County. No utility will be made unavailable to buildings without written approval from the County.
- B. Provide a minimum of 48 hours' written notice to the County prior to <u>any</u> activities that <u>may</u> result in loss of water, firewater, sewer, gas, electrical or data connectivity. Coordinate all changes over activities closely with County.

3.2 SECURITY

- A. All employees of the Contractor and all subcontractors working within the Mendocino County Sheriff's Department Warehouse site will be required to clear a background check by the Mendocino County Sheriff's office. At least fourteen days prior to the start of work, the contractor is required, for each employee, to submit the employee's Name, Date of Birth, Social Security Number and Driver's License state and number.

 Only those employees clearing the Sheriff's Department background check will be permitted on the jail site.
- B. Contractor shall be responsible for securing the project Site and work areas within the Mendocino County Sheriff's Department prior to start of work including:
 - 1. Provide a minimum of 14-day notice before beginning work.
 - 2. In public areas provide clear delineation and appropriate barriers and signage to protect the public and county employees for the entirety of the project.
 - 3. Remove all equipment, temporary facilities, debris and thoroughly clean all affected surfaces before removing barriers.
 - 4. Secure equipment and temporary facilities until time of acceptance.

3.3 Not Used

3.4 MAINTENANCE AND REMOVAL

- A. Maintain tree protection, erosion and sediment control measures, temporary facilities and controls as long as needed for safe and proper completion of the Work. Contractor shall be responsible for ensuring the effectiveness of erosion and sediment control devices, repairing, or replacing as necessary for the duration of the project.
- B. Remove such temporary facilities and controls as rapidly as progress of the Work will permit or as directed by the County.

END OF SECTION

SECTION 02 41 14

DEMOLITION FOR REMODELING

PART 1 GENERAL

1.1 WORK INCLUDED

- A. Remove designated building furnishings equipment and fixtures.
- B. Remove existing evaporative cooler where indicated.
- C. Remove existing construction as indicated.
- D. Protect existing building from weather damage.

1.2 EXISTING CONDITIONS

- A. Conduct demolition to minimize interference with adjacent building areas. Maintain protected egress and access at all times.
- B. Provide, erect, and maintain temporary barriers and security devices.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 PREPARATION

- A. Erect and maintain weatherproof closures for exterior openings and roof decks.
- B. Protect existing items which are not indicated to be altered.
- C. Disconnect, remove, and cap designated utility services within demolition areas.
- D. Mark location of disconnected utilities. Identify and indicate capping locations on Project Record Documents.

3.2 HAZARDOUS MATERIALS

- A. Regulatory Requirements
 - 1. The contractor and all subcontractors involved in this project shall have current knowledge of the United States Asbestos Hazard Emergency Response Act of 1987.
 - 2. The contractor and all subcontractors involved in this project shall have current knowledge of Title 8, California Code of Regulations, Section 1532.1 Construction Lead Standards.

- B. Reports: It is not expected that hazardous materials will be encountered in the Work.
 - 1. Hazardous materials inspection reports for this project are available to the contractor with other project documents.
 - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

3.3 EXECUTION

- A. Demolish in an orderly and careful manner. Protect existing supporting structural members, utility runs and landscaping. Assume existing components not specifically noted to be removed will remain. Protect to maintain original condition.
- B. Except where noted otherwise, immediately remove demolished materials from site.
- C. Remove materials to be re-installed or retained in manner to prevent damage.
- D. Remove, store, and protect for re-installation materials and equipment hindering improvements.
- E. Remove material and equipment to be retained by Owner with care to avoid unnecessary damage.
- F. Remove and promptly dispose of contaminated, vermin infested, or dangerous materials encountered.
- G. Report any encounter with asbestos containing materials to the Architect or Owner immediately and stop work in the area.
- H. Do not burn or bury materials on site.
- I. Remove demolished materials from site as work progresses. Upon completion of work, leave areas of work in clean condition.
- J. Repair areas to remain that are damaged by the Demolition.

END OF SECTION

SECTION 08 11 00

METAL DOORS AND FRAMES

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Provide full flush steel doors and pressed steel frames, including anchors and silencers.

1.2 REFERENCES

- A. Steel Door Institute (SDI): SDI-100 (ANSI/SDI A250.8) Recommended Specifications -Standard Steel Doors and Frames.
- B. National Association of Architectural Metal Manuf. (NAAMM): Hollow Metal Manual.
- C. ASTM E152: Methods of Fire Test of Door Assemblies.
- D. NFPA 105: Smoke Control Guide
- E. ANSI 117.1: Handicap Code
- F. Underwriters Laboratories: Standards as applicable to fire rated doors and frames.
 - 1. Materials tested, labeled and inspected by Warnock Hersey International are acceptable upon approval of authorities.

1.3 SUBMITTALS

- A. Product Data: Furnish manufacturer's literature.
- B. Shop Drawings
 - 1. Submit complete shop drawings listing openings numerically by architect's opening numbers showing product construction, sizes, anchors, reinforcing, cutouts, elevations, and finish
 - 2. Submit notes with shop drawings indicating items that vary from plans and specifications, have conflicts for label compliance, are not in compliance with standards referenced above, have door, frame, hardware or function conflicts, or require review and clarification by architect.
- C. Installation Instructions
 - 1. Submit installation instructions or field delivery receipt.
 - 2. Instructions for installation, maintenance, and preparation for field painting supplied with delivery of material to jobsite.
- D. Schedule: Prepared by supplier, using same reference numbers for details and openings as those on Drawings.

1.4 DELIVERY, STORAGE AND PRODUCT PROTECTION

A. Doors and Frames will be delivered to the job site undamaged with the doors properly protected by cardboard and plastic covering and shall be stored in upright positions, 4 inches off the floor or ground with proper separation for air circulation and shall be stored inside or under complete weather protection. Damage not acknowledged at delivery shall be considered job site damage and the responsibility of the contractor.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Steel Door Products:
 - 1. Curries 747 Series
 - 2. Steelcraft B14 Series
 - 3. The Ceco Corporation High Frequency, Steel Stiffened
- B. Acceptable Steel Frame Products:
 - 1. Curries
 - 2. Steelcraft
 - 3. The Ceco Corporation
- C. Substitutions: Or accepted equal.

2.2 MATERIALS

- A. Doors: Hollow metal flush steel door, 1-3/4" thick.
 - 1. Interior Doors: Minimum 14 gage.
 - 2. Exterior Doors: Minimum 14 gage galvanized.
 - 3. Glazed and Louvered Doors: Provide systems as indicated on Drawings.
 - 4. Fabricate doors from cold rolled, stretcher leveled, prime quality steel to sizes and designs as noted in the plans.
 - 5. Door shall have full flush faces that will show no weld or fabrication marks when painted and viewed from an oblique angle. Stile and rail doors may have face seams at joints.
 - 6. Doors shall be reinforced, stiffened, sound deadened, and insulated by one of the following methods providing the manufacturer furnishes a certification of tested compliance by a recognized testing laboratory to the minimum requirements noted below:
 - a. 90 LB Phenolic Resin impregnated honeycomb core completely filling the inside of the door and laminated to the inside faces of the door panels.
 - b. Steel hat channels at 6" centers welded to both faces and 14-gauge top and bottom welded in channels. Completely fill all internal voids with an inert material to sound deaden and insulate the door.
 - c. Polystyrene foam permanently and fully bonded to the entire surface of face skins.
 - 7. Minimum performance requirements:
 - a. U Factor: Minimum .41
 - b. STC Factor: Minimum 34
 - c. Swing Test: ANSI A151.1 Level "A" 1,000,000 cycle test with twist test
 - d. Corrosion: Pass ANSI A224.1

- 8. Reinforcement:
 - a. Hinges: Minimum 8 gauge
 - b. Locks: Minimum 16 gauge
 - c. Surface Hardware: Minimum 12 gauge
 - d. Panics fully reinforced thru bolting not acceptable.
- 9. Construction: All out swinging exterior doors shall have top caps. Doors will be fully reinforced for all hardware to be surface applied and no hardware will be screwed to the surface skin of the door except kickplates, edging, push plates or nameplates.
- 10. Door Design, Clearances, and Locations: Doors shall be beveled 1/8" in 2" at both edges. Square edge doors and doors with loose hinge fillers will not be acceptable.
 - a. Hinge and strike clearance: 3/32"
 - b. Head: 1/8"
 - c. Floor: (unless otherwise noted) 3/4"
 - d. Meeting Stiles: 3/32"
 - e. Hardware locations: Comply with ADA and CBC requirements; refer to drawings.

B. Frames:

- 1. Interior Frames: Welded (pre-assembled) type; minimum 14 gage.
 - a. Frames shall be full face welded, square, and accurately sized and have a welded spreader bar at the base for field removal. Acceptable tolerances per SDI 117.
- 2. Door Silencers: Manufacturer's standard resilient type; removable for replacement.
- C. Jamb Anchors:
 - Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch thick.
 - a. Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
 - 1) Four anchors per jamb from 60 to 90 inches high
- D. Floor Anchors: Formed from same material as frames, not less than 0.042 inch thick, and as follows:
 - 1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.

2.3 FABRICATION

- A. Conform to requirements of SDI (ANSI A250 Series) or NAAMM.
- B. Reinforce and prepare doors and frames to receive hardware.
 - 1. Refer to hardware specifications for hardware requirements.
 - 2. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
 - 3. Reinforce doors and frames to receive nontemplated, mortised and surface-mounted door hardware.
 - 4. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
 - 5. .

C. Frames:

- 1. Welded Frames: Accurately form and cut mitered corners of welded type frames; weld on inside surfaces; grind welded joints to smooth uniform finish.
- 2. Head Reinforcement: Reinforce frames wider than 4'-0" with minimum 12 gage formed steel channels welded in place, flush with top of frames.

- D. Door Silencers:
 - Place minimum three single bumpers on single door frames; space equally along strike jambs.
 - 2. Place minimum of two single bumpers on double door frames; place on frame heads.
- E. Provide jamb anchors per SDI-100 (ANSI/SDI 250.8) and NAAMM; weld floor jamb anchors in place.
- F. Provide double doors tested and approved without astragals.
- G. Edge Clearances:
 - 1. Between Doors and Frames: Maximum 1/8" at head and jambs.
 - 2. Door Sills (No Threshold): Maximum 3/8".
 - 3. Door Sills (Threshold): Maximum 3/4" above finished floor.
 - 4. Between Edges of Pairs of Doors: Maximum 1/8".
 - 5. Fire Rated Doors: As required for fire ratings.
- H. Finish: Comply with requirements of Section 09 90 00 for primer including application and compatibility with specified finishes.
 - 1. Interior Units: Prime paint.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install doors and frames in accordance with SDI-100 (ANSI/SDI A250.8) and ANSI/SDI A250.11 or NAAMM "Hollow Metal Manual" and with manufacturer's recommendations and installation instructions.
 - 1. Install fire rated units in conformance with fire label requirements and NFPA 80.
- B. Install doors and frames plumb and square, and with maximum diagonal distortion of 1/16".
 - 1. Coordinate hardware installation with requirements of Section 08 71 00.
 - 2. Coordinate glass installation with requirements of Section 08 80 00.
- C. Remove and replace doors and frames damaged during delivery, storage, installation and construction.
 - 1. Paste filler repair shall not be permitted.
- D. After installation, touch-up scratched paint surfaces.

SECTION 08 71 00

DOOR HARDWARE

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Provide hardware for hollow metal and wood doors.
 - 1. Provide cylinders for doors fabricated with hardware.

1.2 REFERENCES

- A. ANSI A115 and A115W Series: Door and Frame Preparation Standards.
- B. ANSI A156.1 through A156.20: Standards for various hardware items.
- C. National Fire Protection Association: NFPA 80, Fire Doors and Windows.
- D. California Building Code: California Code of Regulations, Title 24, Part 2.
- E. Americans with Disabilities Act Accessibility Guidelines (ADAAG).

1.3 SYSTEM DESCRIPTION

- A. Products: Provide each type of hardware (hinges, pivots, locksets, latchsets, closers, trim) from single manufacturer unless otherwise indicated in Hardware Schedule.
 - 1. Provide products by manufacturers specified and manufacturers listed in Hardware Schedule, with references to catalog numbers and designations.
- B. Fire Rated Doors: Comply with requirements of Uniform Building Code Standard 7-2, NFPA 80 and applicable codes for fire rated door hardware; provide hardware bearing Underwriters Laboratory (UL) labels.
 - 1. Doors indicated in fire rated partitions and walls shall be positive latching and self-closing, with smoke gaskets.
 - Smoke Control in Pressurized Areas: Provide automatic door bottoms in addition to standard smoke gaskets for fire and smoke rated doors in pressurized areas such as stair wells; comply with applicable code requirements.
- C. Access for Persons with Disabilities: Comply with California Building Code and Americans with Disabilities Act Accessibility Guidelines (ADAAG).

1.4 SUBMITTALS

- A. Product Data/Cut Sheets: Submit catalog cuts for each type of hardware.
- B. Shop Drawings: Indicate locations and mounting heights of hardware.
 - 1. Supply templates to door and frame manufacturers for proper and accurate sizing and locations of cut-outs for hardware.

- C. Hardware Schedule: Prepare a vertical schedule of hardware:
 - 1. Door numbers must be in numerical sequence.
 - 2. List each opening, door size, door hand, door and frame material, description of to and from, manufacturer's numbers and finish.
 - 3. Provide seven copies of this schedule and three sets of catalog cut sheets.
 - 4. Hardware supplier shall retype schedule when changes occur during the project and supply new schedules, at no additional expense.
- D. Keying Schedule: Coordinate directly with Owner's Representative.
- E. Closeout Submittal: Record actual locations of installed cylinders and master key codes on Project Record Documents.

1.5 QUALITY ASSURANCE

- A. Supplier Qualifications: Recognized builder's hardware supplier with minimum five year's successful experience in scheduling and furnishing hardware.
 - 1. Provide services of architectural hardware consultant to supervise hardware supply.
- B. Pre-Installation Meeting: Convene pre-installation meeting prior to commencing work of this section. Include persons involved with installation of doors, frames, and hardware.
- C. Upon receipt of approved Hardware Schedule, architectural hardware consultant shall attend keying conference with Owner and Architect.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver hardware in manufacturer's original packages, marked for intended opening and use.
- B. Pack complete with necessary screws, bolts, keys, instructions, and installation template, if necessary, for spotting mortising tools.
- C. Upon delivery, furnish complete list of hardware for checking, clearly marked to correspond with marking on each package.
 - 1. Review list for completeness and accuracy.

1.7 OPERATION AND MAINTENANCE DATA

- A. Provide manufacturer's parts list and maintenance instructions for each type of hardware supplied and necessary wrenches and tools required for proper maintenance of hardware.
- B. Contractor will provide owner with all wrenches and tools included with hardware including extra screws.

1.8 WARRANTY

A. Provide 1-year warranty covering products and workmanship. Warranty period for closers shall be 10 years.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General: Review Drawings for hardware group locations and door types; where not fully covered in Hardware Schedule, comply with following general requirements; inform Architect where conflicts occur.
 - 1. Provide hardware items with accessories complete to function as intended.
- B. Hinges and Butts: ANSI A156.1; comply with following unless otherwise indicated.
 - 1. Manufacturers:
 - a. McKinney Products Co., Division of Essex Industries.
 - b. Stanley Hardware Division of Stanley Works.
 - c. Or accepted equal.
 - 2. Doors 1-3/4" Thick: 4-1/2" heavy weight, extra heavy weight ball or oilite bearing where over 40" wide.
 - a. Provide widths sufficient to clear trim projection when door swings 180 degrees.
 - b. Doors 1-3/8" Thick: 3-1/2" size.
 - 3. Provide minimum 3 hinges to 90" high, 4 hinges to 120" high for each door leaf, unless otherwise indicated.
 - 4. Provide nonferrous butts with non-removable pins at exterior and locked outswinging doors, non-rising at interior doors; stainless steel where labeled; steel butts at labeled interior doors.
 - 5. Provide ball bearing or oilite bearing hinges at doors with closers.
 - 6. Tips: Flat button tips with matching plug.
- C. Locking Devices: Provide of metal matching specified finish; interior parts of steel and zincdichromate plating, to resist rusting and corrosion; do not supply plastic, die-cast or aluminum mechanisms.
 - 1. Manufacturers:
 - a. Schlage Lock Co.
 - b. Or accepted equal.
 - 2. Type:
 - a. Mortise Locksets: ANSI A156.13, Series 1000, Grade 1, Mortise Type with 6 pin tumbler cylinders, except where otherwise indicated in Hardware Schedule.
 - b. Cylindrical Locksets: ANSI A156.2, Grade 2, privacy type Bored Type, except where otherwise indicated in Hardware Schedule.
- D. Cylinders, Keys, and Keying: Hardware manufacturers shall provide for grand master, master key alike or key different keying as directed by Owner.
 - 1. Manufacturer:
 - a. Schlage Lock Co.
 - b. Or accepted equal.
 - 2. Provide 7 pin tumbler with interchangeable core unless otherwise indicated.
 - 3. Provide cylinders of extruded brass bar material per ANSI A156.5.
 - 4. Provide construction cylinders for doors requiring locking during construction; construction cylinders shall be removed and replaced just prior to Owner occupancy.
 - 5. Submit keys for final use to Owner; provide not less than two keys for each lockset, six of each type and level of master key, two grand master keys, and 5% extra blanks; comply with guidelines in ANSI a156.28, Appendix A.
 - 6. Hardware manufacturers shall key and register lock cylinders.
 - 7. Key Control System: Provide complete key control system with identification and storage capacity suitable for Project per ANSI A156.5.
- E. Closers: ANSI A156.4, furnish products of one manufacturer; full rack and pinion type with steel spring and non-freezing hydraulic fluid.

- 1. Manufacturers:
 - a. LCN Closers Division Schlage Lock Co.
 - b. Or accepted equal.
- 2. Provide controls for regulating closing, latching, speeds and back check.
- 3. Arm types shall suit individual conditions, as approved; supply parallel-arm closers at reverse bevel doors and where doors swing full 180 degrees.
- 4. Mount closers on room side or pull side unless otherwise indicated.
- 5. Sizes: Adjustable to following maximum door operating pressures:
 - a. Typical Doors: 5 pounds.
 - b. Fire Rated Doors: 15 pounds.
 - c. Make labeled doors self-closing.
 - d. Closers shall be adjusted by factory representative.
- 6. Design: ANSI Modern Type with Cover, unless otherwise indicated.
- F. Thresholds, Stops, Trim, and Miscellaneous Hardware: Provide as indicated, as specified, as included in Hardware Schedule, and as required for complete installation.
 - 1. Manufacturers Specified:
 - a. Pivots per ANSI A156.4: Stanley.
 - b. Exit Devices per ANSI A156.3: Von Duprin.
 - c. Flushbolts per ANSI A156.3: Ives.
 - d. Coordinators: Trimco.
 - e. Kickplates: Trimco.
 - f. Wall/Floorstops per ANSI A156.8: Ives.
 - g. Overhead stops per ANSI A156.8: Glynn-Johnson.
 h. Thresholds per ANSI A156.21: Pemko.

 - i. Doorsweeps: Pemko.
 - j. Pulls: Trimco.
 - k. Sliding Door Hardware per ANSI A156.14: Henderson.
 - I. Or accepted equal.
 - 2. Weather-Stripping: Provide continuous weather-stripping at top and sides of exterior doors.
 - 3. Fire Rated Gaskets: Provide continuous fire rated gaskets at top and sides of fire rated doors per ANSI A156.22.
 - 4. Kick Plates: Height indicated by 1" less than door width; minimum 0.050" thick.

2.2 **ACCESSORIES**

- A. General: Provide complete hardware with accessories as required for doors and applications
- B. Templates: Furnish templates or physical hardware items to manufacturers concerned sufficiently in advance to avoid delay in Work.
- C. Reinforcing Units: Furnished by door manufacturer, coordinated by hardware manufacturer.
- D. Fasteners: Furnish as recommended by manufacturer and as required to install secure hardware.
 - 1. Finish: Match hardware.
 - 2. Furnish screws for items applied on gypsum board sufficiently long to provide solid connection to framing or backing
- E. Through Bolts: Through bolts and grommet nuts shall be avoided on door faces in highly visible areas, unless no alternative is possible, as directed and approved, and shall not be used for solid wood core doors.

F. Electrical and Mechanical: Make provisions and coordinate requirements for mechanical and electrical devices in connection with hardware.

2.3 FINISHES

- A. Finish: BHMA 626 (US26D), satin chrome.
- B. Closers: Metal cover finished to match door-operating hardware.
- C. Other Items: Provide manufacturer's standard finishes matching similar hardware types on same door, and maintain acceptable finish considering anticipated use.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install finish hardware specified under this section; coordinate with manufacturer and installation of doors and frames.
- B. Fit hardware prior to painting. Remove for painting of doors and frames before final installation of hardware.
- C. Install hardware in accordance with manufacturer's instructions.
- No extra cost will be allowed because of changes or corrections necessary to facilitate installation of hardware.

3.2 MOUNTING POSITIONS

- A. Heights given are center line heights from finished floor.
 - 1. Locks and Latches: 38" to center of lever.
 - 2. Top Hinge: To jamb manufacturer's standard, but not greater than 10" from head of frame to center line of hinge.
 - 3. Bottom Hinge: To jamb manufacturer's standard, but not greater than 12-1/2" from floor to center line of hinge.
 - 4. Intermediate Hinges: Equally spaced between top and bottom hinges and from each other.
 - 5. Hinge Mortise on Door Leaf: 1/4" to 5/16" from stop side of door.
 - 6. Dead Bolt: Not more than 44" from floor to operating lever.
- B. Comply with recommendations of Builders Hardware Manufacturers Association, subject to approval, for heights of items not indicated.

3.3 ADJUSTING

- A. Qualified hardware supplier's or manufacturer's representatives shall inspect installation and make adjustments.
 - 1. Adjust closers, locks, and critical operational hardware.
 - 2. Deliver instructions for maintenance and future adjustments to Owner's Representative.

3.4 HARDWARE SCHEDULE

A. The Hardware Schedule establishes a type and standard of quality.

- B. Examine Drawings and Specifications and furnish proper hardware for door openings, whether listed or not.
- C. Bring omissions to attention of Architect prior to bid opening for instructions; otherwise, list will be considered complete; no extras will be allowed.

D. Hardware Groups:

GROUP 1					
3	HINGE, FULL MORTISE	TA2714	US26D	MK	
1	CLASSROOM LOCK	10G37LP	US26D	SA	
1	DOOR CLOSER	7500	689	NO	
1	WALLSTOP	409	US32D	RO	
1	GASKET	S773D		PE	
GROUP 2					
1	DEADBOOT	B581	US26D	SCH	
GROUP 3					
1	DEADBOLT	B581	US26D	SCH	
2	SURFACE BOLT	SB453-8- TB	US26D	I	

- **11B-404.2.7 Door and gate hardware.** Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with Section 11B-309.4. Operable parts of such hardware shall be 34 inches (864 mm) minimum and 44 inches (1118 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. Exceptions:
- 1. Existing locks shall be permitted in any location at existing glazed doors without stiles, existing overhead rolling doors or grilles, and similar existing doors or grilles that are designed with locks that are activated only at the top or bottom rail.
- 2. Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1372 mm) maximum above the finish floor or ground provided the self-latching devices are not also self-locking devices and operated by means of a key, electronic opener, or integral combination lock.
- **11B-404.2.8 Closing speed.** Door and gate closing speed shall comply with Section 11B-404.2.8. 11B-404.2.8.1 Door closers and gate closers. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.
- 11B-404.2.8.2 Spring hinges. Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.
- **11B-404.2.9 Door and gate opening force.** The force for pushing or pulling open a door or gate other than fire doors shall be as follows:
- 1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.
- 2. Sliding or folding doors: 5 pounds (22.2 N) maximum.
- 3. Required fire doors: the minimum opening force allowable by the appropriate administrative authority, not to exceed 15 pounds (66.7 N).
- 4. Exterior hinged doors: 5 pounds (22.2 N) maximum.

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

Exception:

Exterior doors to machinery spaces including, but not limited to, elevator pits or elevator penthouses; mechanical, electrical or communications equipment rooms; piping or equipment catwalks; electric substations and transformer vaults; and highway and tunnel utility facilities.

When, at a single location, one of every eight exterior door leafs, or fraction of eight, is a powered door, other exterior doors at the same location, serving the same interior space, may have a maximum opening force of 8.5 pounds (37.8 N). The powered leaf(s) shall be located closest to the accessible route.

- a. Powered doors shall comply with Section 11B-404.3. Powered doors shall be fully automatic doors complying with Builders Hardware Manufacturers' Association (BHMA) A156.10 or low energy operated doors complying with BHMA A156.19.
- b. Powered doors serving a building or facility with an occupancy of 150 or more shall be provided with a back-up battery or back-up generator. The back-up power source shall be able to cycle the door a minimum of 100 cycles.
- c. Powered doors shall be controlled on both the interior and exterior sides of the doors by sensing devices, push plates, vertical actuation bars or other similar operating devices complying with Sections11B-304, 11B-305 and 11B-308.

At each location where push plates are provided there shall be two push plates; the centerline of one push plate shall be 7 inches (178 mm) minimum and 8 inches (203 mm) maximum above the floor or ground surface and the centerline of the second push plate shall be 30 inches (762 mm) minimum and 44 inches (1118 mm) maximum above the floor or ground surface. Each push plate shall be a minimum of 4 inches (102 mm) diameter or a minimum of 4 inches by 4 inches (102 mm by 102 mm) square and shall display the International Symbol of Accessibility complying with Section 11B-703.7.

At each location where vertical actuation bars are provided the operable portion shall be located so the bottom is 5 inches (127 mm) maximum above the floor or ground surface and the top is 35 inches (889 mm) minimum above the floor or ground surface. The operable portion of each vertical actuation bar shall be a minimum of 2 inches (51 mm) wide and shall display the International Symbol of Accessibility complying with Section 11B-703.7.

Where push plates, vertical actuation bars or other similar operating devices are provided, they shall be placed in a conspicuous location. A level and clear floor or ground space for forward or parallel approach complying with Section 11B-305 shall be provided, centered on the operating device. Doors shall not swing into the required clear floor or ground space.

- d. Signage identifying the accessible entrance required by Section11B-216.6 shall be placed on, or immediately adjacent to, each powered door. Signage shall be provided in compliance with BHMA A156.10 or BHMA A156.19, as applicable.
- e. In addition to the requirements of Item d, where a powered door is provided in buildings or facilities containing assembly occupancies of 300 or more, a sign displaying the International Symbol of Accessibility measuring 6inches by 6 inches (152 mm by 152 mm), complying with Section 11B-703.7, shall be provided above the door on both the interior and exterior sides of each powered door.

11B-404.2.10 Door and gate surfaces. Swinging door and gate surfaces within 10 inches (254mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1 ₁₆ inch (1.6 mm) of the same plane as the other and be free of sharp or abrasive edges. Cavities created by added kick plates shall be capped.

Exceptions:

- 1. Sliding doors shall not be required to comply with Section 11B-404.2.10.
- 2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at 60 degrees minimum from the horizontal shall not be required to meet the 10 inch (254 mm) bottom smooth surface height requirement.
- 3. Doors and gates that do not extend to within 10 inches (254 mm) of the finish floor or ground shall not be required to comply with Section 11B-404.2.10.

SECTION 09 21 16

GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes: Provide gypsum board systems including gypsum board, joint treatment, acoustical accessories, and general accessories for complete installation.

1.2 REFERENCES

- A. ASTM C754: Installation of Steel Framing Members to Receive Screw-Attached Gypsum Wallboard, Backing Board, or Water-Resistant Backing Board.
- B. ASTM C840: Application and Finishing of Gypsum Board.

1.3 SYSTEM DESCRIPTION

- A. Performance Requirements: Perform gypsum board systems work in accordance with recommendations of ASTM C754 and ASTM C840 unless otherwise specified.
 - 1. Loads: Comply with California Building Code requirements for design of metal framing for gypsum board systems.
 - a. Deflection: Maximum L/240 typical, L/360 where plaster or tile is indicated.
 - 2. Seismic Requirements: Comply with code requirements for seismic bracing.
- B. Fire-Rated Assemblies: Listed by Underwriter's Laboratory (UL), Gypsum Association (GA) File No's in 2006 Fire Resistance Design Manual, California Building Code Table 721.1 or other listing approved by applicable authorities.
- C. Systems Responsibility: Provide products manufactured by or recommended by manufacturer of gypsum board to maintain single-source responsibility for system.
- D. Openings: Obtain dimensions and locations from other trades and provide openings and enclosures for accessories, specialties, equipment, and ductwork.

1.4 SUBMITTALS

- A. Product Data
 - 1. Provide product data on gypsum board, joint tape, and decorative finish.

1.5 PROJECT CONDITIONS

- A. Do not begin installation of interior gypsum board until space is enclosed, space is not exposed to other sources of water, and space is free of standing water.
- B. Maintain areas to receive gypsum board at minimum 50 degree F for 48 hours prior to application and continuously after application until drying of joint compound is complete; comply with ASTM C840.
- C. Immediately remove from site gypsum board for interior use exposed to water, including gypsum board with water stains, with signs of mold, and gypsum board with mildew.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. United States Gypsum Co., USG Corp.
- B. Georgia-Pacific Corp.
- C. National Gypsum Co.
- D. Or accepted equal.

2.2 MATERIALS

- A. Gypsum Board Standard
 - 1. ASTM C1396, TYPE X, FIRE RATED, 5/8" thick paper faced gypsum panels with tapered edges.
- B. Gypsum Board Accessories: Comply with ASTM C840.
 - 1. Gypsum board sealer: Provide one Coat "Hamilton Prep Coat Plus" prior to application of gypsum board texture.
 - 2. Provide protective coated steel corner beads and edge trim; type designed to be concealed in finished construction by tape and joint compound.
 - 3. Corner Beads: Manufacturer's standard metal beads.
 - 4. Edge Trim: "J", "L", "LK", or "LC" casing beads manufacturer's standard.
 - 5. Reinforcing Tape, Joint Compound, Adhesive, Water, Fasteners: Types recommended by system manufacturer and conforming to ASTM C475.
 - a. Typical Joint Compound: Chemical hardening type for bedding and filling, readymixed or powder vinyl type for topping.
 - 6. Control Joints: Back to back casing beads.
 - a. Back control joints with 4 mil thick polyethylene air seal.
- C. Gypsum Board Texture: Equal to USG "Sheetrock Brand" ready mixed wall and ceiling spray texture.

PART 3 EXECUTION

- A. Gypsum Board Installation: Install in accordance with ASTM C840 and manufacturer's recommendations.
 - 1. Use screws when fastening gypsum board to furring and to framing.
 - 2. Erect gypsum board with ends and edges occurring over firm bearing.
 - a. Ensure joints of second layer do not occur over joints of first layer in double layer applications.
 - 3. For fire rated systems comply with requirements for fire ratings.
 - a. Provide "five-sided" gypsum board boxes at all breaches in the envelope of fire rated wall or ceiling assemblies larger than 16 square inches. Some items causing this condition may be electrical receptacles or switches, recessed lights, fire extinguishers, medical gas outlets, equipment panels, recessed film illuminators, etc.
 - 4. Place control joints to be consistent with lines of building spaces and as directed by Architect.
 - a. Provide where system abuts structural elements.
 - b. Provide at dissimilar materials.
 - c. Lengths exceeding 30'-0" in partitions.
 - d. Ceiling areas exceeding 50'-0" or 2500 square feet.

- e. Wings of "L", "U" and "T" shaped ceilings.
- 5. Place corner beads at external corners; use longest practical lengths.
- 6. Place edge trim where gypsum board abuts dissimilar materials.
- 7. Tape, fill, and sand exposed joints, edges, corners and openings to produce surface ready to receive finishes; feather coats onto adjoining surfaces.
- 8. Finishing: Comply with Gypsum Association (GA) "Levels of Gypsum Board Finish".
 - a. GA Level 4 (Typical): Provide three coat finishing and sanding is required for surfaces indicated to be painted; provide flush, smooth joints and surfaces ready for applied paint finishes.
 - b. Texture:
 - 1) At walls to be painted provide light orange peel spray texture.
 - 2) Under fabric wall covering tape and sand only.
- 9. Remove and replace defective work.

SECTION 09 22 16

NON-STRUCTURAL METAL FRAMING

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes non-load-bearing steel framing members for the following applications:

1. Interior framing systems (e.g., partition walls, framed soffits, furring, etc.).

1.2 SUBMITTALS

A. Product Data: For each product indicated.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- 1. Dietrich Metal Framing
- 2. Or accepted equal.

2.2 NON-LOAD-BEARING STEEL FRAMING, GENERAL

- A. Framing Members, General: Comply with ASTM C 754 for conditions indicated.
 - 1. Steel Sheet Components: Comply with ASTM C 645 requirements for metal, unless otherwise indicated.
 - 2. Protective Coating: Manufacturer's standard corrosion-resistant zinc coating, unless otherwise indicated.

2.3 STEEL FRAMING FOR FRAMED ASSEMBLIES

- A. Steel Studs and Runners: ASTM C 645.
 - 1. Minimum Base-Metal Thickness: 20 Guargue
- B. Slip-Type Head Joints: Where indicated, provide the following:
 - 1. Double-Runner System: ASTM C 645 top runners, inside runner with 2-inch- deep flanges in thickness not less than indicated for studs and fastened to studs, and outer runner sized to friction fit inside runner.
- C. Flat Strap and Backing Plate: Steel sheet for blocking and bracing in length and width indicated.
 - 1. Minimum Base-Metal Thickness: 0.0312 inch.

2.4 AUXILIARY MATERIALS

A. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

PART 3 EXECUTION

3.1 INSTALLATION, GENERAL

- A. Installation Standard: ASTM C 754.
 - 1. Gypsum Plaster Assemblies: Also comply with requirements in ASTM C 841 that apply to framing installation.
 - 2. Portland Cement Plaster Assemblies: Also comply with requirements in ASTM C 1063 that apply to framing installation.
 - 3. Gypsum Veneer Plaster Assemblies: Also comply with requirements in ASTM C 844 that apply to framing installation.
 - 4. Gypsum Board Assemblies: Also comply with requirements in ASTM C 840 that apply to framing installation.

3.2 INSTALLING FRAMED ASSEMBLIES

- A. Where studs are installed directly against exterior masonry walls or dissimilar metals at exterior walls, install isolation strip between studs and exterior wall.
- B. Install tracks (runners) at floors and overhead supports. Extend framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing around ducts penetrating partitions above ceiling.
 - Slip-Type Head Joints: Where framing extends to overhead structural supports, install
 to produce joints at tops of framing systems that prevent axial loading of finished
 assemblies.
 - 2. Door Openings: Screw vertical studs at jambs to jamb anchor clips on door frames; install runner track section (for cripple studs) at head and secure to jamb studs.
 - a. Install two studs at each jamb, unless otherwise indicated.
 - b. Install cripple studs at head adjacent to each jamb stud, with a minimum 1/2-inch clearance from jamb stud to allow for installation of control joint in finished assembly.
 - c. Extend jamb studs through suspended ceilings and attach to underside of overhead structure.
 - 3. Other Framed Openings: Frame openings other than door openings the same as required for door openings, unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.
 - 4. Fire-Resistance-Rated Partitions: Install framing to comply with fire-resistance-rated assembly indicated and support closures and to make partitions continuous from floor to underside of solid structure.
 - a. Firestop Track: Where indicated, install to maintain continuity of fire-resistance-rated assembly indicated.
 - 5. Sound-Rated Partitions: Install framing to comply with sound-rated assembly indicated.
- C. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8 inch from the plane formed by faces of adjacent framing.

SECTION 13095

RADIANT RF BARRIERS

PART 1 GENERAL

- 1.01 SECTION INCLUDES
 - A. SKIF Radiant RF Barriers
- 1.02 REFERENCES
 - A. ASTM C 1224 Standard Specification for Reflective Insulation for Building Applications/
 - B. ASTM D 2261 Standard Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine).
 - C. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 - D. ASTM E 903 Standard Test Methods for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.
 - E. ASTM E 2599 Standard Practice for Specimen Preparation and Mounting of Reflective Insulation, Radiant Barrier and Vinyl Stretch Ceiling Materials for Building Applications to Assess Surface Burning Characteristics.
 - F. CAN/ULC S102 Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.
 - G. NFPA 286 Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.
 - H. IEEE-299 IEEE Standard Method for Measuring the Effectiveness of Electromagnetic Shielding Enclosures
 - I. RIMA International US-006-10 Platinum Member Verified Products.
- 1.03 SUBMITTALS
 - A. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations
 - 2. Storage and handling requirements and recommendations
 - 3. Installation methods
 - B. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in factory production of reflective insulation of the types specified with a minimum of 10 years documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store and handle products in accordance with manufacturer's instructions.
 - 1. Store products in manufacturer's unopened packaging until ready for installation.
 - 2. Store in clean, dry areas indoors.
 - 3. Do not store directly on the floor
- C. Protect materials during storage, handling and installation.

1.06 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.07 WARRANTY

A. Provide with the manufacturer's 10-year limited warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturer: Covertech Fabricating, Inc.
- B. Or accepted equal.

2.02 RADIANT RF BARRIERS

- A. Bases of Design: rFOIL Ultra NT Solid Radiant Barrier for Sensitive Compartmented Information Facilities (SCIF's) is capable of providing a minimum shielding effectiveness of (100MHz-10GHz) 85 dB. Ultra Solid Radiant Barrier also is a highly effective vapor barrier.
 - 1. Description: Single layer of polyethylene bubbles, bonded to and sandwiched between 2 highly reflective aluminum surfaces.
 - 2. Width: 48 inches.
 - 3. Edge Type: Square edge

- 4. Physical Properties:
 - a. Normal Thickness: 3/16 inch.
 - b. Fire Rating: ASTM E 84, Mounted to ASTM E 2599: Class 1/Class A.
 - c. Emissivity, ASTM C 1371: 0.03.
 - d. Reflectivity, ASTM E 903: 0.97.
 - e. Water Vapor Permeability, ASTM E 96: 0.01 perms.
 - f. Resistance to Fungi and Bacteria, ASTM C 1338: Does not promote growth.
 - g. Pliability, ASTM C 1224: No cracking.
 - h. Bleeding and Delamination, ASTM C 1224: No bleeding or delamination.
 - i. Corrosiveness, ASTM D 3310: Passes.
 - j. Tensile Strength, ASTM D 2261: Length 27.34, Width 16.31

2.03 ACCESSORIES

A. Reflective Tape: "rFOIL 15012" or "rFOIL 15013" aluminum foil tape.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examination of the areas and conditions under which work of this section will be installed.
- B. Verify and coordinate with mechanical and electrical services penetrating or to penetrate the areas to be shielded.
- C. Notify Architect of unsatisfactory conditions that would adversely affect installation or subsequent use before proceeding.
- D. Do not begin installation until unacceptable conditions are corrected.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

- A. Install Radiant RF Barrier Insulation in accordance with manufacturer's instructions at locations indicated.
- B. Measure all area(s) requiring shielded from RF transmission. Cut Radiant Barrier to the appropriate lengths, by adding 12 inches to overlap and cover all walls, ceilings and floors of the area to be covered.

C. Attachment

- 1. Roll-up doors: Attach the Ultra NT directly to the doors with double-sided tape or an approved construction adhesive or spray adhesive.
- 2. At all joints, overlap all Ultra NT at least 6 inches and seal all seams using foil tape specified.
- 3. Where the door meets the floor, extend the Ultra NT across the joint, so that it extends at least 6 inches onto the floor.
- 4. Repair punctures or tears in Radiant RF Barrier by covering the puncture with Ultra NT and taping with foil tape specified. Follow manufacturer's application recommendations.

3.04 PROTECTION

- A. Protect installed Radiant RF Barrier from damage during construction.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

SECTION 15 83 80

POWER VENTILATORS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Centrifugal roof/wall ventilators.

1.03 PERFORMANCE REQUIREMENTS

- A. Project Altitude: Base fan-performance ratings on actual Project site elevations.
- B. Operating Limits: Classify according to AMCA 99.

1.04 SUBMITTALS

- A. Product Data: Include rated capacities, furnished specialties, and accessories for each type of product indicated and include the following:
 - 1. Certified fan performance curves with system operating conditions indicated.
 - 2. Certified fan sound-power ratings.
 - 3. Motor ratings and electrical characteristics, plus motor and electrical accessories.
 - 4. Material thickness and finishes, including color charts.
 - 5. Dampers, including housings, linkages, and operators.
 - 6. Fan speed controllers.
- B. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 1. Wiring Diagrams: Power, signal, and control wiring.
 - 2. Design Calculations: Calculate requirements for selecting vibration isolators for designing vibration isolation bases.
 - 3. Vibration Isolation Base Details: Detail fabrication, including anchorages and attachments to structure and to supported equipment. Include auxiliary motor slides and rails, and base weights.

- C. Coordination Drawings: Reflected ceiling plans and other details, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
 - 1. Roof framing and support members related to duct penetrations.
 - 2. Size and location of initial access modules for acoustic tile.
- D. Field quality-control test reports.
- E. Operation and Maintenance Data: For power ventilators to include in emergency, operation, and maintenance manuals.

1.05 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. AMCA Compliance: Products shall comply with performance requirements and shall be licensed to use the AMCA-Certified Ratings Seal.
- C. NEMA Compliance: Motors and electrical accessories shall comply with NEMA standards.
- D. UL Standard: Power ventilators shall comply with UL 705.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver fans as factory-assembled unit, to the extent allowable by shipping limitations, with protective crating and covering.
- B. Disassemble and reassemble units, as required for moving to final location, according to manufacturer's written instructions.
- C. Lift and support units with manufacturer's designated lifting or supporting points.

1.07 COORDINATION

- A. Coordinate size and location of structural-steel support members.
- B. Coordinate installation of roof curbs, equipment supports, and roof penetrations.

1.08 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Belts: One set for each belt-driven unit.

PART 2 PRODUCTS

2.01 CENTRIFUGAL ROOF/WALL VENTILATORS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- Greenheck.
- 2. Loren Cook Company.
- Penn Ventilation.
- MK. Plastics
- B. Description: Direct- or belt-driven centrifugal fans consisting of housing, wheel, fan shaft, bearings, motor and disconnect switch, drive assembly, curb base, and accessories.
- C. Where fiberglass construction is specified, all FRP surfaces shall be ground smooth prior to top coating to ensure there are no exposed glass fibers. All hardware located within the airstream shall be made of stainless steel and encapsulated in FRP. Finish color shall be gray. No exposed metal parts in the airstream will be allowed.
- D. Where fiberglass construction is specified, the housings shall be made using fire retardant resins. All interior surfaces of the housing exposed to the airstream shall be resin rich and contain no more than 20% of "C" grade glass veil. The exterior surfaces of the housing shall be resin rich and use a paraffinated resin stabilized against ultraviolet degradation. No exposed metal parts will be allowed within the airstream. The finish color shall be gray. Housing and bearing support shall be constructed of welded structural steel members to prevent vibration and rigidly support the shaft and bearings and coated with enamel or epoxy to prevent corrosion.
- E. Where fiberglass construction is specified, fan wheel shall be manufactured from a FRP encapsulated steel hub and backplate with FRP blades strapped in for added strength. The wheels will be made using a non-fire-retardant resin chosen for strength characteristics. Finish color shall be gray. The wheel and fan inlet shall be carefully matched and shall have precise running tolerances for maximum performance and operating efficiency. The shaft shall be 304 stainless steel.
- F. Where aluminum construction is specified, provide spun-aluminum discharge baffle to direct discharge air upward, with rain and snow drains.
 - 1. Fan Wheels: Aluminum hub and wheel with backward-inclined blades.
- G. Belt-Driven Drive Assembly: Resiliently mounted to housing, with the following features:
 - 1. Fan Shaft: Turned, ground, and polished steel; keyed to wheel hub.
 - 2. Shaft Bearings: Permanently lubricated, permanently sealed, self-aligning ball bearings.
 - 3. Pulleys: Cast-iron, adjustable-pitch motor pulley.
 - Fan and motor isolated from exhaust airstream.

H. Accessories:

- 1. Variable-Speed Controller: Solid-state control to reduce speed from 100 to less than 50 percent.
- 2. Disconnect Switch: Non-fusible type, with thermal-overload protection mounted inside fan housing, factory wired through an internal aluminum conduit.

- 3. Bird Screens:Removable, 1/2-inch (13-mm) mesh, anodized class I aluminum wire.
- 4. Dampers: Counterbalanced, parallel-blade, backdraft dampers mounted in curb base; factory set to close when fan stops.
- 5. Where noted in the HVAC equipment schedules, or when shown on the Drawings, provide fan speed control switches and integral unit thermostats.
- I. If Project has more than one type or configuration of in-line centrifugal fan, delete paragraph below and schedule fans on Drawings.

2.02 MOTORS

A. Enclosure Type: Refer to HVAC Fan Schedule.

2.03 ELECTRICAL EQUIPMENT

A. Electric Motors

- 1. Electric motors in NEMA frame sizes shall conform to the requirements in Division 16, unless otherwise specified herein.
- 2. The motor manufacturer shall confirm that motors used to power equipment are provided with bearings that will provide a bearing life equal to the driven equipment or better. Confirmation shall be included with shop drawing submittal.
- 3. Motors will be selected to be non-overloading over the entire operating range of the equipment. A safety factor of 25 percent will be added to all motors up to and including 50 horsepower. A safety factor of 15 percent will be added to all motors over 50 horsepower. Motors indicated on the schedules are to be considered a minimum. This sizing is not to limit compliance with the above requirements

B. Electrical Equipment

- 1. Electrical equipment which is furnished under this Section shall meet the requirements specified in Division 16:
 - Disconnect switches, motor starters and combination motor starters (starters with disconnecting means and short circuit protection) shall be as specified in Division 16.
 - b. Cord connected controls for hazardous areas shall be provided with intrinsically safe relays, which shall be as specified in Division 16
 - c. Raceways, boxes, fittings and supports shall be as specified in Division 16.
 - d. Wires and cables shall be as specified in Division 16.

2.04 SOURCE QUALITY CONTROL

A. Sound-Power Level Ratings: Comply with AMCA 301, "Methods for Calculating Fan Sound Ratings from Laboratory Test Data." Factory test fans according to AMCA 300, "Reverberant Room Method for Sound Testing of Fans." Label fans with the AMCA-Certified Ratings Seal.

B. Fan Performance Ratings: Establish flow rate, pressure, power, air density, speed of rotation, and efficiency by factory tests and ratings according to AMCA 210, "Laboratory Methods of Testing Fans for Rating."

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install power ventilators level and plumb.
- B. Support units using spring isolators having a static deflection of 1 inch (25 mm).
- C. Secure roof-mounting fans to roof curbs with cadmium-plated hardware.
- D. Install units with clearances for service and maintenance.

3.02 CONNECTIONS

- A. Drawings indicate general arrangement of ducts and duct accessories. Make final duct connections with flexible connectors.
- B. Install ducts adjacent to power ventilators to allow service and maintenance.

3.03 FIELD QUALITY CONTROL

- A. Perform the following field tests and inspections and prepare test reports:
 - 1. Verify that shipping, blocking, and bracing are removed.
 - Verify that unit is secure on mountings and supporting devices and that connections to ducts and electrical components are complete. Verify that proper thermal-overload protection is installed in motors, starters, and disconnect switches.
 - 3. Verify that cleaning and adjusting are complete.
 - 4. Disconnect fan drive from motor, verify proper motor rotation direction, and verify fan wheel free rotation and smooth bearing operation. Reconnect fan drive system, align and adjust belts, and install belt guards.
 - 5. Adjust belt tension.
 - 6. Adjust damper linkages for proper damper operation.
 - 7. Verify lubrication for bearings and other moving parts.
 - 8. Verify that manual and automatic volume control and fire and smoke dampers in connected ductwork systems are in fully open position.
 - 9. Disable automatic temperature-control operators, energize motor and adjust fan to indicated rpm, and measure and record motor voltage and amperage.
 - 10. Shut unit down and reconnect automatic temperature-control operators.
 - 11. Remove and replace malfunctioning units and retest as specified above.

B. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.04 ADJUSTING

- A. Adjust damper linkages for proper damper operation.
- B. Adjust belt tension.
- C. Replace fan and motor pulleys as required to achieve design airflow.
- D. Lubricate bearings.

SECTION 16 11 00

RACEWAYS, BOXES, FITTINGS AND SUPPORTS

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Furnish and install complete raceway systems as shown on the Drawings and as specified herein.
- B. Conduit routes shown on Drawings are to identify the general routing of raceways to be installed exposed. Raceways shall be run near the ceilings or along the walls of the areas through which they pass, supported every 36" max, and shall be routed to avoid conflicts both existing and new with HVAC, lighting fixtures, doors, etc.
- C. Furnish all labor, materials, equipment, accessories and components and install a complete seismic restraint and support system for raceway systems as indicated on the Drawings and as specified herein.
 - 1. All supports, hangers, bracing and appurtenances shall conform to the latest applicable requirements of the California State Building Code except as supplemented or modified by the requirements specified in this Section.

1.02 SUBMITTALS

A. Submit, in accordance with Section 01300, the manufacturers' names and product designation or catalog numbers with marked cut sheets of all materials specified.

PART 2 PRODUCTS

2.01 RACEWAYS AND FITTINGS

- A. Steel Conduit and Fittings
 - Intermediate metal conduit (IMC), couplings, factory elbows and fittings shall be medium wall steel tubing with a hot-dipped galvanized finish inside and out after threading and shall comply with UL/1242.
 - Electrical metallic tubing (EMT), factory elbows and fittings shall be thin wall steel tubing with an electrically galvanized finish after fabrication and comply with ANSI C80.3 and UL/797.
 - 3. Acceptable manufacturers:
 - a. Allied Tube & Conduit Corp.
 - b. Wheatland Tube.
 - c. Western Tube and Conduit Corporation.
 - d. Or equal.
 - 4. Intermediate metal conduit fittings shall be of the threaded type, and shall be steel or malleable iron, with a hot-dipped galvanized finish. Threadless fittings and split couplings are not allowed except in specific applications as approved by the Engineer.

- 5. Electrical metallic tubing fittings shall be of the rain tight, concrete tight, compression type with malleable iron or pressure cast steel body, steel hex type compression nut and electrically galvanized finish.
- 6. Acceptable manufacturers:
 - a. Appleton Electric Co.
 - b. O-Z Gedney Co.
 - c. RACO Inc.
 - d. Gould/Efcor
 - e. Steel City
 - f. Or equal

2.02 BOXES AND FITTINGS

- A. Dry and Damp Location Boxes and Fittings
 - 1. Outlet boxes shall be zinc-galvanized, extra depth, pressed steel with knockouts and of size and type suitable for the intended application.
 - 2. Boxes that are less than 100 cubic inches in size used for junction or pull boxes shall be zinc galvanized pressed steel not less than 14 USS gauge with appropriate blank covers, minimum size 4-11/16-in square by 2-1/8-in deep.
 - Boxes that are 100 cubic inches and larger shall be constructed of hop dip galvanized sheet steel without knockouts. Covers shall be secured with round head brass machine screws. All joints shall be welded and ground smooth.
 - 4. Terminal cabinets shall be NEMA 12 sheet steel unless otherwise shown on the Drawings. Boxes shall be painted and have continuously welded seams. Welds shall be ground smooth and galvanized. Box bodies shall be flanged and shall not have holes or knockouts. Box bodies shall not be less than 14 gauge metal and covers shall not be less than 12 gauge metal. Terminal boxes shall be furnished with latching hinged doors, terminal mounting straps and brackets. Terminal blocks shall be rated not less than 20A, 600V.
 - 5. Acceptable Manufacturers:
 - a. Appleton
 - b. Raco
 - c. Steel City
 - d. Hoffman
 - e. Electromate Division of Robroy Ind.
 - f. Wiegmann

B. Miscellaneous Fittings

- 1. Flexible couplings shall be type ECGJH as manufactured by the Crouse-Hinds Co.; Appleton Electric Co.; Killark Electric Manufacturing Co. or equal.
- 2. Conduit hubs shall be as manufactured by Myers Electric Products, Inc. or equal.
- 3. Conduit wall seals for new concrete walls below grade shall be O.Z./Gedney Co., Type WSK; [Linkseal]; Spring City Electrical Manufacturing Co., Type WDP, or equal.
- 4. Conduit wall seals for cored holes shall be Type CSMC as manufactured by the O.Z./Gedney Co,. or equal.

- 5. Conduit wall and floor seals for sleeved openings shall be Type CSMI as manufactured by the O.Z./Gedney Co., or equal.
- 6. Combination expansion-deflection fittings including bonding jumper for any movement (i.e. due to settlement) up to 3/4" shall be Type XD as manufactured by the Crouse-Hinds Co.; Type DX as manufactured by O.Z./Gedney Co.; or equal.
- 7. Combination expansion-deflection fittings including bonding jumper for any movement (i.e. due to settlement) greater than 3/4" shall be Type XJGD as manufactured by Crouse-Hinds Co. or equal.
- 8. Conduit sealing bushings shall be O.Z./Gedney, Type CSB, or equal.
- Grounding bushings shall be malleable iron with integral insulated throat rated for 150 degrees C, with solderless lugs as manufactured by Crouse Hinds/Cooper, Series HGLL; Appleton, Series GIB; O.Z./Gedney, Type HBLG, or equal.

2.03 HARDWARE

A. Conduit Mounting Equipment

- 1. In dry indoor areas, hangers, rods, backplates, beam clamps, channel, etc. shall be galvanized iron or steel.
- 2. Furnish any and all necessary supports, brackets, conduit sleeves, racks and bracing as required. All boxes and hardware shall be galvanized zinc plated steel except that stainless steel shall be used in areas designated as "WET" or "CORROSIVE" on the Drawings.

B. Conduit Identification Plates

- 1. Conduit identification plates shall be embossed stainless steel with stainless steel band, permanently secured to the conduit without screws.
- 2. Identification plates shall be as manufactured by the Panduit Corp., or equal.

C. Wall and Floor Slab Opening Seals

1. Wall and floor slab openings shall be sealed with a UL approved expending material which equals or exceeds the fire rating of the wall or floor construction as manufactured by the Thomas & Betts Corp.; Pro Set Systems; Neer Mfg. Co.; Specified Technologies, Inc., or equal.

D. Cold Galvanizing Compound

 Cold galvanizing compound shall be as manufactured by ZRC Products Company, a Division of Norfolk Corp., or equal.

E. Conduit Supports

Trapezes

- a. In dry indoor areas, beams, channels, struts, hangers, bracing, rods, beam clamps, accessories and components shall be galvanized steel.
- PVC coated steel beams, channels, struts or fiberglass beams, channels, struts with stainless steel hangers, bracing, rods, beam clamps, accessories and components shall be used in areas designated "WET", "DAMP" and "CORROSIVE" where

indicated and in outdoor locations. Fiberglass channels shall be resistant to the chemicals resent in the area in which it is used.

2. Conduit Racks

 In dry indoor areas, conduit racks, accessories and components shall be galvanized steel.

3. Conduit Hangers

- a. In dry indoor areas, conduit clamps, rods, beam clamps, bracing, accessories and components shall be galvanized steel.
- 4. Adjustable steel and plastic band hangers, adjustable band hangers, adjustable swivel ring hangers and J-hangers shall not be allowed.
- 5. All hangers, bracing, rods, beam clamps, accessories and components shall be as manufactured by the Carpenter & Paterson Inc.; Grinnell Corporation; B-Line Systems Inc., or equal.
- 6. Design of supplemental structural steel required for attachment to the building structural support system shall be the full responsibility of the Support Engineer.

PART 3 EXECUTION

3.01 RACEWAY APPLICATIONS

A. All conduit of a given type shall be the product of one manufacturer.

3.02 BOX APPLICATIONS

- A. Unless otherwise specified herein or shown on the Drawings, all boxes shall be metal.
- B. Exposed switch, receptacle and lighting outlet boxes and condulet fittings shall be cast or malleable iron.
- C. Concealed switch, receptacle and lighting outlet boxes shall be pressed steel.
- D. Terminal boxes, junction boxes and pull boxes shall have NEMA ratings suitable for the location in which they are installed.
- E. Boxes flush in block, brick or tile walls shall be located at a course line and provided with square tile covers. Flush boxes shall not project beyond the finished surfaces nor shall surfaces project more than 1/8-in beyond the box enclosure. Wiring devices located in close proximity to each other shall be installed in one solid gang box with single cover.
- F. All conduit bodies and pulling outlets shall comply with NEC wire bending space requirements. Mogul type fittings shall be used for sizes 2-1/2-in and larger.

TABLE 16110-1				
Raceway Application Guidelines				
Location/Circuit Type	Raceway Type			
Clean, dry finished areas - offices,	Electrical metallic tubing (EMT) for lighting, switch,			
administrative areas, lobbies, control room,	and receptacle circuits routed exposed.			
lunch room, toilets, and laboratories, etc.				
Outdoor areas - all locations.	Intermediate metal conduit (IMC) for power wiring,			
	lighting, switch, and receptacle circuits.			

3.03 FITTINGS APPLICATIONS

- A. Combination expansion-deflection fittings shall be used where exposed conduits cross structure expansion joints or in straight runs where expansion is anticipated. Combination expansion-deflection fittings shall be installed where embedded conduits cross structural expansion joints. Provide bonding jumpers around fittings.
- B. All underground conduit penetrations at walls or other structures shall be sealed watertight. Conduit wall seals and sleeves shall be used in accordance with the manufacturer's installation instructions and the details shown on the Drawings.
- C. Conduit sealing bushings shall be used to seal conduit ends exposed to the weather and at other locations shown on the Drawings.

3.04 INSTALLATION

- A. No conduit smaller than 3/4-in electrical trade size shall be used, nor shall any have more than the equivalent of three 90 degree bends in any one run. Pull boxes shall be provided as required by the CEC after every 270 degrees of bends and for straight run not to exceed 200 feet or as directed.
- B. No wire shall be pulled until the conduit system is complete in all details; in the case of concealed work, until all rough plastering or masonry has been completed; in the case of exposed work, until the conduit system has been completed in every detail.
- C. All conduit which may under any circumstance contain liquids such as water, condensation, liquid chemicals, etc, shall be arranged to drain away from the equipment served. If conduit drainage is not possible, conduit seals shall be used to plug the conduits. The ends of all conduits shall be temporarily plugged to exclude dust, moisture and debris from entering during construction.
- D. Conduit ends exposed to the weather shall be sealed with conduit sealing bushings.
- E. Conduit terminating in NEMA 3R, 4, 4X, and 12 enclosures shall be terminated with Myers type conduit hubs.
- F. Conduit terminating in pressed steel boxes shall have double locknuts and insulated bushings.
- G. Conduits containing equipment grounding conductors and terminating in sheet steel boxes shall have insulated throat grounding bushings.
- H. Conduits shall be installed using threaded fittings except for EMT.
- I. The use of running threads is prohibited. Where such threads are necessary, a 3-piece union shall be used.
- J. Conduit supports, other than for underground raceways, shall be spaced at intervals not exceeding the distance required by the CEC to obtain rigid construction or 36" max.
- K. Single conduits shall be supported by means of one-hole pipe clamps in combination with one-screw back plates, to raise conduits from the surface. Multiple runs of conduits shall be supported on fabricated channel trapeze type racks with steel horizontal members and threaded hanger rods. The rods shall be not less than 3/8-in diameter. Surface mounted panel boxes, junction boxes, conduit, etc., shall be supported by spacers to provide a minimum of 1/2-in clearance between wall and equipment.

L. Conduit Supports (Other than Underground Raceways)

1. Trapezes

- a. Conduit support trapezes shall be vertically supported every 10-ft or less, as required to obtain rigid conduit construction.
- b. Lateral seismic restraints (Sway Bracing) shall be spaced 30-ft or less.
- c. Horizontal seismic restraints shall be spaced at 40-ft or less. There shall be at least one horizontal restraint per horizontal run.
- d. Attachment to structural steel shall be by beam clamps or welded beam attachment. C-clamps will not be allowed for vertical hangers. Side beam clamps with beam hooks shall be used for seismic restraint only.
- e. Attachment to concrete shall be cast-in-place inserts, cast-in place welded plates with welded studs or stainless steel adhesive anchors.

2. Flush Mounted Supports

- a. Support shall be spaced 10-ft or less, as required to obtain rigid conduit construction.
- Attachment to concrete shall be with cast-in-place inserts, cast-in place welded plates with welded study or stainless adhesive anchors.

3. Conduit Racks

- a. Support shall be spaced 10-ft or less, as required to obtain rigid conduit construction.
- b. Horizontal seismic restraints shall be spaced at 30-ft or less.
- c. Attachment to concrete shall be with cast-in-place inserts, cast-in place welded plate with welded study or stainless adhesive anchors.

4. Conduit Hangers

- a. Conduit hangers shall be vertical supported 10-ft or less, as required to obtain rigid conduit construction.
- b. Lateral seismic restraints (Sway Bracing) shall be spaced 20-ft or less.
- c. Horizontal seismic restraints shall be spaced at 30-ft or less. There shall be at least one horizontal restraint per horizontal run.
- d. Attachment to structural steel shall be by beam clamps or welded beam attachment. C-clamps will not be allowed for vertical hangers. Side beam clamps with beam hooks shall be used for seismic restraint only.
- e. Attachment to concrete shall be cast-in-place inserts, cast-in place welded plates with welded studs or stainless steel adhesive anchors.
- 5. All reinforcing bars shall be located by the Electrical Subcontractor with the use of a rebar locator prior to installing adhesive capsule type anchors. Mark the location of all reinforcing bars in an area bounded by a line drawn at least 18-in from the edge of the support bearing/weld plates on all four sides of the bearing/weld plates prior to fabricating and installing bearing/weld plates.
- 6. Where interference occurs, adjust anchor locations to clear reinforcing bars and alter support configuration at no additional cost to the Authority.
- M. Miscellaneous steel for the support of fixtures, boxes, transformers, starters, contactors, panels and conduit shall be furnished and installed. Channel supports shall be ground smooth and fitted with plastic end caps.
- N. Steel channels, flat iron and channel iron shall be furnished and installed for the support of all electrical equipment and devices, where required, including all anchors, inserts, bolts, nuts, washers, etc., for a rigid installation. Channel supports shall be ground smooth and fitted with plastic end caps.

- O. All conduits on exposed work, shall be run at right angles to and parallel with the surrounding wall and shall conform to the form of the ceiling. No diagonal runs will be allowed. Bends in parallel conduit runs shall be concentric. All conduits shall be run perfectly straight and true.
- P. Where conduits pass through openings in walls or floor slabs, the remaining openings shall be sealed against the passage of flame and smoke in accordance with UL requirements and the details shown on the Drawings. The sealing method shall have a UL fire rating, which equals or exceeds the fire rating of the wall or floor construction.
- Q. Conduits shall not cross pipe shafts, access hatches or vent duct openings. They shall be routed to avoid such present or future openings in floor or ceiling construction.
- R. Conduits passing from heated to unheated spaces, exterior spaces, refrigerated spaces, cold air plenums, etc., shall be sealed with "Duxseal" as manufactured by Manville or seal fitting to prevent the accumulation of condensation.
- S. Conduits shall be located a minimum of 3-in from steam or hot water piping. Where crossings are unavoidable, the conduit shall be kept at least 1-in from the covering of the pipe crossed.
- T. Mandrels shall be pulled through all existing conduits which will be reused and through all new conduits 2-in in diameter and larger prior to installing conductors.
- U. 3/16-in polypropylene pull lines shall be installed in all new conduits noted as spares or designated for future equipment. Conduit noted as spare shall be capped or plugged at both ends with easily removable fittings
- V. Where no type or size is indicated for junction boxes, pull boxes or terminal cabinets, they shall be sized in accordance with the requirements of NEC Article 314. Enclosure type and material shall be as specified herein.
- W. Pull or junction boxes shall be furnished and installed where shown on the Drawings, in every 200 feet of straight conduit runs or in runs where more than the equivalent of four 90 degree bends occur or at any point necessary for wire pulling and splicing. Splices shall not be made in pulling elbows.

SECTION 16 12 00

WIRES AND CABLES (600 VOLT MAXIMUM)

PART 1 GENERAL

1.01 SCOPE OF WORK

A. Furnish, install and test all wire, cable and appurtenances as shown on the Drawings and as specified herein.

1.02 SUBMITTALS

- A. Submit, in accordance with Section 01300, samples of proposed wire. Each sample shall have the size, type of insulation and voltage stenciled on the jacket.
- B. Installed unapproved wire shall be removed and replaced at no additional cost to the Owner.

1.03 DELIVERY, STORAGE AND HANDLING

A. Carefully handle all conductors to avoid kinks and damage to insulation.

1.04 WARRANTY

A. The manufacturer shall warrant the cable against defects for a period of one year from date of installation and shall remove and replace defective cables at his own expense during this warranty period.

PART 2 PRODUCTS

2.01 GENERAL

- A. Wires and cables shall be of annealed, 98 percent conductivity, soft drawn copper.
- B. All conductors shall be stranded, except that lighting and receptacle wiring may be solid.
- C. Except for control, signal and instrumentation circuits, wire smaller than No. 12 AWG shall not be used.
- D. Wire shall have 600 Volt insulation except where indicated otherwise.
- E. All wire of a given type shall be the product of a single manufacturer.

2.02 BUILDING WIRE

- A. Wire for lighting, receptacles and other circuits not exceeding 150 Volts to ground shall be NEC type THHN/THWN as manufactured by General Cable.; American Insulated Wire Corp.; Southwire Co.; or equal.
- B. Wire for circuits over 150 Volts to ground within buildings and structures shall be NEC type XHHW-2 as manufactured by General Cable.; American Insulated Wire Corp.; Southwire Co.; or equal.
- C. Wire for circuits over 150 Volts to ground used underground or for service entrance shall be NEC type RHH-RHW-2/USE-2, flame retardant and CT rated per IEEE 1202 as manufactured by The Okonite Co.; General Cable.; American Insulated Wire Corp.; or equal.

- D. Bare copper ground wire shall be stranded, annealed copper wire ASTM-B3.
- E. Equipment grounding conductors shall be NEC Type THW green and sized in accordance with NEC Table 250-122. Ground grid conductors shall be insulated unless shown otherwise on the Drawings.

2.03 SPLICES (POWER CONDUCTORS)

- A. Unless otherwise indicated on the Drawings, splices shall not be made in the cables without prior written approval of the Engineer. Where splicing is approved by the Engineer, splicing materials for all 600 Volt splices shall be made with long barrel, tin plated copper compression (hydraulically pressed) connectors and insulated with heavy wall heat shrinkable tubing. The conductivity of all completed connections shall be not less than that of the uncut conductor. The insulation resistance of all completed connections of insulated conductors shall be not less than that of the uncut conductor.
- B. Wire lugs shall be tin plated copper, long barrel compression type (hydraulically pressed) for wire sizes No. 8 AWG and larger. Lugs for No. 10 AWG and smaller wire shall be locking spade type with insulated sleeve. Lugs shall be as manufactured by the Thomas and Betts Co.; Burndy; Amp; or equal.
- C. Compression type connectors shall be insulated with a heat shrink boot or outer covering and epoxy filling. Splice kits shall be as manufactured by Raychem (Tyco); Ideal Industries; 3M Co. or equal.
- D. Solderless pressure connectors shall be self-contained, waterproof and corrosion-proof units incorporating prefilled silicone grease to block out moisture and air. Connectors shall be sized according to manufacturer's recommendations. The connectors shall be UL listed and CSA approved, as manufactured by King Innovation, Ideal Industries, Inc., or equal.

2.04 MOTOR CONNECTIONS

A. Motor connections shall be ring type mechanical compression terminations installed on the branch circuit wires and the motor leads and secured with bolt, nut and spring washer. Connections shall be insulated with a Raychem Type RVC, roll-on stub insulator; Thomas & Betts, Shrink-Kon MSCV20; or equal. For wire sizes N0. 8 and larger, long barrel, tin plated copper compression (hydraulically pressed) type connections Burndy Co., or equal) shall be installed on the branch circuit wires and the motor leads. Connections shall be insulated with heavy duty heat shrinkable material (Raychem Corp., or equal.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Uniquely identify all wires, cables and each conductor of multi-conductor cables (except lighting and receptacle wiring) at each end and in all manholes, hand holes and pull boxes with wire and cable markers.
- B. Use lubrications to facilitate wire pulling. Lubricants shall be UL approved for use with the insulation specified.
- C. The crimping tools used in securing the conductor in the compression type connectors or terminal lugs shall be those made for that purpose and for the conductor sizes involved. The crimping tool shall be the ratchet type which prevents the tool from opening until the crimp action is completed. Such tools shall be a product of the connector manufacturer.

- D. Install an equipment grounding conductor in all raceways.
- E. Seal openings in slabs and walls through which wires and cables pass.
- F. Pull cables from the direction that requires the least tension. Use a feed-in tube and sheave designed for cable installation. Use sheaves with radii that exceed the cable manufacturer's recommended minimum bending radius. Use a dynamometer and constant velocity power puller. Velocity should not be less than 15-ft./min. or more than 50-ft./min. Do not exceed the cable manufacturer's maximum recommended tension.
- G. If cable cannot be terminated immediately after installation, install heat shrinkable end caps.

3.02 WIRE COLOR CODE

- A. All wire shall be color coded or coded using electrical tape in sizes where colored insulation is not available. Where tape is used as the identification system, it shall be applied in all junction boxes, manholes and other accessible intermediate locations as well as at each termination.
- B. The following coding shall be used:

System	Wire	Color
240/120 Volts Single-Phase, 3 Wire	Neutral Line 1 Line 2	White Black Red

C. Neutral or ground wires that terminate in a Panelboard and require color tape shall have the color tape extend at least 6-in from the termination point.

3.03 TERMINATIONS AND SPLICES

A. Power conductors: Unless otherwise indicated on the Drawings, no splices may be made in the cables without prior written approval of the Engineer. Where splicing is approved, terminations shall be die type or set screw type pressure connectors as specified. Splices (where allowed) shall be die type compression connector and waterproof with heat shrink boot or epoxy filling for copper conductors # 4 AWG and larger. Splices shall be solderless pressure connectors with insulating covers for copper conductors # 6 AWG and smaller. Aluminum conductors (where specified) shall employ terminations and splices specifically designed for aluminum conductors.

3.04 FIELD TESTING

- A. Test all 600 Volt wire insulation with a megohm meter after installation and prior to termination. Make tests at not less than 1000 Volts DC. Test duration shall be one minute. Submit a written test report of the results to the Engineer. Notify the Engineer in writing 48 hours prior to testing.
- B. Field testing and commissioning shall be done in accordance with the latest revision of the "Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems" published by the International Electrical Testing Association (NETA Standard ATS-1999)unless otherwise modified by this Section. Minimum wire insulation resistance shall not be less than 250 Megohms.

SECTION 16 14 10

WIRING DEVICES

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and install wiring devices as shown on the Drawings and as specified herein.
- B. Provide all interconnecting conduit and branch circuit wiring for receptacle circuits in accordance with the CEC.

1.02 SUBMITTALS

A. Submittals shall be in accordance with Section 01300.

1.03 REFERENCE STANDARDS

A. Wiring devices shall comply with the requirements of the National Electric Code (NEC) and shall be Underwriters Laboratories (UL) labeled.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Wall switches shall be heavy duty, specification grade, toggle action, flush mounting quiet type. All switches shall conform to the latest revision of Federal Specification WS 896. Wall switches shall be suitable for the area classification indicated and shall be of the following types and manufacturer:
 - 1. Single pole, 20 Amp, 120/277 Volt Cooper Wiring Devices; Hubbell Wiring Devices-Kellems; Pass & Seymour, Inc., or equal.
 - 2. Three way, 20 Amp, 120/277 Volt Cooper Wiring Devices, Hubbell Wiring Devices-Kellems; Pass & Seymour, Inc., or equal.
- B. Receptacles shall be heavy duty, specification grade of the following types and manufacturer or equal. Receptacles shall conform to Fed Spec WC596-F.
 - 1. Duplex, 20 Amp, 125 Volt, 2 Pole, 3 Wire; Cooper Wiring Devices; Hubbell Wiring Devices-Kellems; Pass & Seymour, Inc., or equal.
 - 2. Ground fault interrupter, duplex, 20 Amp, 125 Volt, 2 Pole, 3 Wire, GFCI feed thru type with "test" and "reset" buttons. Cooper Wiring Devices; Hubbell Wiring Devices-Kellems; Pass & Seymour, Inc, or equal.
 - 3. Single twist-lock, 50 Amp, 125 Volt, 2 Pole, 3 Wire; Cooper Wiring Devices; Hubbell Wiring Devices; Arrow Hart, Pass & Seymour, Inc., or equal.

C. Device Plates

- 1. Plates for indoor flush mounted devices shall be of the required number of gangs for the application involved and shall be as follows:
 - a. Administration type buildings: Smooth, high impact nylon of the same manufacturer and color as the device. Final color shall be as selected by the Engineer.
 - b. Where permitted in other areas of the plant, flush mounted devices in cement block construction shall be Type 302 high nickel (18-8) stainless steel of the same manufacturer as the devices.
- 2. Plates for indoor surface mounted device boxes shall be cast metal of the same material as the box, Crouse-Hinds No. DS23G and DS32G; Appleton FSK1DRC, FSK1TSEC; Pass & Seymour or equal.
- 3. Oversized plates shall be installed where standard plates do not fully cover the wall opening.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Switch and receptacles outlets shall be installed flush with the finished wall surfaces in areas with stud frame and gypsum board construction, in dry areas with cement block construction or when raceways are shown as concealed on the Drawings.
- B. Do not install flush mounted devices in areas designated DAMP, WET or WET/CORROSIVE on the Drawings. Provide surface mounted devices in these areas.
- C. Where individual ground fault interrupter type receptacles are shown on the Drawings connected to the same circuit, the Contractor shall provide all ground fault interrupter type receptacles. Use of one ground fault interrupter type receptacle to protect downstream conventional receptacles is unacceptable.
- D. Coordinate with Owner for exact mounting height(s) of each outlet.
- E. The location of all devices is shown, in general, on the Drawings and may be varied within reasonable limits so as to avoid any piping or other obstruction without extra cost, subject to the approval of the Engineer. Coordinate the installation of the devices for piping and equipment clearance.

SECTION 32 31 13

CHAIN LINK FENCES AND GATES

PART 1 GENERAL

1.1 WORK INCLUDED

- A. Fence framework, fabric, and accessories.
- B. Concrete anchorage for posts.
- C. Manual gates and related hardware.

1.2 REFERENCES

- A. ASTM A90/A90M Zinc alloy coating test methods.
- B. Product Manual CLF 2445 Chain Link Fence manufacturers institute.
- C. ASTM A123 Pipe, Steel, Black and Hot-dipped Zinc-coated (Galvanized) Welded and Seamless, for Ordinary Uses.
- D. ASTM A392 Zinc coated steel chain link fence fabric.
- E. ASTM F567 Installation of chain link fencing.

1.3 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in commercial quality chain link fencing with five years' experience.
- B. Installation: ANSI/ASTM F567.

1.4 SUBMITTALS

- A. Product Data: Submit product data for all specified products.
- B. Shop Drawings:
 - 1. Include plan layout, grid, spacing of components, accessories, fittings, hardware, anchorages, and schedule of components.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Anchor Fence Co.
- B. Builders Fence Co.
- C. Or accepted equal.

2.2 MATERIALS

- A. Framework: ASTM A120; galvanized Schedule 40 steel pipe, standard weight, one piece without joints.
- B. Fabric: 2" mesh, 3.5 diamonds per foot of height, 9 gage, zinc coated steel wire fabric ASTM A392. Knuckled top and bottom selvage.
- C. Steel Pipe: Type I: ASTM F-1083, Galvanized Schedule 40 steel pipe, standard weight, Framework and fittings.
- D. Fabric: Galvanized steel wire: ASTM F-668, Type 2B). ASTM A 641 Galvanized steel core wire, 9 gauge.

2.3 COMPONENTS

- A. Line Posts: 2.875" O.D. galvanized steel pipe
- B. Pull, Corner and Terminal Posts: 2.875" galvanized steel pipe
- C. Top and Brace Rail: 1.66 inch diameter, plain end, sleeve coupled steel pipe lengths not less than 18'-0".
- D. Gate Posts: 2.875" O.D.
- E. Gate Frame: 1.90" O.D. 1. Bracing: 1.66" O.D.
- F. Caps: steel or malleable iron, galvanized coated. Sized to post dimension, set screw retained.
- G. Fittings: Sleeves, bands, clips, rail ends, tension bars, fasteners and fittings: galvanized steel.
- H. Tension Wire: 7 gage thick steel, single strand.
- I. Swinging Gate Hardware: Fork type latch with gravity drop; center gate stop and drop rod; Mechanical keepers; two 180 degree gate hinges per leaf and hardware for padlock.

2.4 FABRICATION

- A. Gates: Construct gates with interior bracing and truss-rods to span opening without deflection.
- B. Accessories: Same finish as framing.

2.5 FINISHES

- A. Galvanized Coating.
- B. Accessories: Same finish as framing.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install framework, fabric, accessories and gates in accordance with ANSI/ASTM F567.
- B. Provide fence at heights noted on drawings.
- C. Space line posts at intervals not exceeding 10 feet. Set all posts as detailed in plans.
- D. Set terminal gate and posts plumb, in concrete footings with top of footing 2 inches below finish grade.
- E. Provide top rail through line post tops and splice with 7 inch long rail sleeves.
- F. Brace each gate and corner post back to adjacent line post with horizontal center brace rail and diagonal truss rods. Install brace rail, one bay from end and gate posts.
- G. Install center and bottom brace rail on all corner leaves, gate leaves, and at all 10 foot high fences.
- H. Stretch fabric between terminal posts or at intervals of 100 feet maximum, whichever is less.
- I. Position bottom of fabric 2 inches above finished grade.
- J. Fasten fabric to top rail, line posts, braces, bottom rail and bottom tension wire with wire ties maximum 15 inches on centers.
- K. Attach fabric to end, corner, and gate posts with tension bars and tension bar clips.
- L. Install bottom tension wire stretched taut between terminal posts typical at all 6 foot high fences. Install bottom rail 1-5/8" diameter typical at all fences greater than 8 feet high.
- M. Install gates with fabric to match fence. Install three hinges per leaf, latch, catches, drop bolt and sockets retainer and locking clamp.
- N. Provide concrete center drop to foundation depth and drop rod retainers at center of double gate openings.