

PROJECT MANUAL

FOR

The COUNTY OF MENDOCINO MEASURE B

REGIONAL BEHAVIORAL HEALTH TRAINING CENTER REMODEL

8207 East Road
Redwood Valley, CA 95470



Prepared by:
FACILITIES & FLEET DIVISION
851 LOW GAP ROAD
UKIAH, CA 95482
Tel: (707) 234-6054

BID NO. 33-20

Date of Issue:
DECEMBER 4, 2020

SECTION 00500 - AGREEMENT FOR LUMP SUM BID

THIS AGREEMENT, made on the ____ day of March in the year 2020, between the County of Mendocino, hereinafter called COUNTY, and Adams Commercial General Contracting, Inc. 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 Regional Behavioral Health Training Facility Remodel Project**, in accordance with the contract documents, including the Addenda thereto, all as adopted by COUNTY.

SECOND: The work under this contract described below shall be completed within thirty (60) 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:

1. Invitation to Bid
2. Instructions to Bidders
3. Bid Forms
4. Contractor's Guarantee
5. Close-Out Items including all Warranties
6. Coordination
8. Drawings & Specifications
9. General and Technical Conditions of the Specifications
10. All modifications thereof incorporated before execution of the Contract

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

Two hundred ninety-five thousand eight hundred fifty-eight dollars \$295,858.00

This sum constitutes the bid for the following project components (referenced hereunder to specifications section). This sum includes the following alternate bids:

Alternate A: Add fire protection system.

Alternate C: Add lighting system - replacement and retrofit.

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:

Janette Rane **03/08/2021**
DEPARTMENT HEAD DATE

Budgeted: ☒ Yes ☐ No

Budget Unit: 1713 CA 001

Line Item: 864365

Grant: ☐ Yes ☒ No

Grant No.: _____

CONTRACTOR/COMPANY NAME

By: [Signature]

Date: 3/1/21

NAME AND ADDRESS OF CONTRACTOR:

Adams Commercial General Contracting, Inc.

217 E Street

Eureka, CA 95501

COUNTY OF MENDOCINO

By: [Signature]
DAN GJERDE, Chair

BOARD OF SUPERVISORS

Date: MAR 22 2021

ATTEST:

CARMEL J. ANGELO, Clerk of said Board

By: [Signature] **MAR 22 2021**
Deputy

I hereby certify that according to the provisions of Government Code section 25103, delivery of this document has been made.

CARMEL J. ANGELO, Clerk of said Board

By: [Signature] **MAR 22 2021**
Deputy

INSURANCE REVIEW:

By: [Signature]
Risk Management

03/08/2021

Date: _____

COUNTY COUNSEL REVIEW:

APPROVED AS TO FORM:

CHRISTIAN M. CURTIS,
County Counsel

By: Matthew Kiedrowski
Deputy

Date: 03/08/2021

EXECUTIVE OFFICE/FISCAL REVIEW:

By: Janette Rane
Deputy CEO

03/08/2021

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: _____

00002 - PROJECT DIRECTORY

OWNER: County of Mendocino
501 Low Gap Road
Ukiah, CA 95482
Measure B Project Manager, Alyson Bailey

AGENT: Mendocino County Executive Office
Facilities and Fleet Division
851 Low Gap Road
Ukiah, CA 95482
(707) 234-6054
Doug Anderson, Assistant Facilities Manager

ARCHITECT: Schlosser/Newberger Architects
435 North Main Street
Fort Bragg, CA 95437
707-961-0911
Email: todd@linsdesign.com
Todd Newberger, Architect

SANITARIAN: Carl Rittiman & Associates, Inc.
P.O. Box 590
Mendocino, CA 95460
Email: andy@carlrittiman.com
Andy Kawczak, Associate

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MEASURE B – REGIONAL TRAINING CENTER
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COUNTY OF MENDOCINO
Executive Office
Facilities & Fleet Division

CARMEL J. ANGELO
CHIEF EXECUTIVE OFFICER

851 Low Gap Road
Ukiah, CA 95482

Email: facilities@mendocinocounty.org
Website: www.mendocino-county.org

Office: (707) 234-6050
Fax: (707) 463-4673

ADDENDUM No: 1

PROJECT: BID 33-20 Regional Mental Health Training Center Remodel

DATE: 12-24-2020

ISSUED BY: Doug Anderson

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

INQUIRIES AND CLARIFICATIONS TO PROJECT PLANS AND SPECIFICATIONS

1. Q: Is the contractor required to provide temporary power in an existing building, or may the contractor use building power for construction?

A: Existing building power will be available for the work on this contract.

2. Q: Sheet Notes call for installation of new electrical meter panels. Will new conduit and feeders from PG&E be required? Will the contractor be responsible for PGE meter permit application and inspection fees?

A: The intent of the sheet notes at the service entrance on sheet E2.1 is to remove the meter from the existing meter panel and split the service to provide for two new meters; one for the Training Center, and one for the adjacent residence. We do not anticipate a requirement to increase the service entrance conduit. The County will apply for and pay PG&E permit application fees. Contractor will provide information as requested to complete the application, and will schedule all inspections required to energize the new meters.

3. Q: How is the manual transfer switch wired with the new and existing panels?

A: The manual transfer switch should be wired between the Training Center meter and the existing Training Center sub-panel to allow generator power to feed the sub-panel.

4. Q: New parking lot striping, wheel stops and space numbers are shown but not noted; existing striping is different from that shown and sealcoat is only shown at new ADA parking. Will the entire parking lot be re-sealed and re-striped?

A: Yes, provide application of an Asphalt Emulsion seal coat, SSI VG-40 or equal to the entire asphalt parking lot per manufacturer's instructions; providing striping and concrete wheel stops as shown. Stall numbering is for reference only and shall not be included.

5. Q: Bid Alternate A calls for a new fire sprinkler system with deferred approval sprinkler design. It will take more than 60 days to complete the deferred approval drawings, secure approvals, procure materials and install the system. Will additional time be added if the alternate is accepted?

A: Yes - In the event that Alternate A is accepted the contractor shall be entitled to an extension of time. Such time extension shall be granted by the county upon submission of reasonable request for time extension from the contractor based on an integrated project schedule.

6. Q: Is the walkway in front of the building called out on sheet A1.2 a new formed and poured concrete walkway?

A: No, the Base Bid includes new accessible concrete walkway for the back exit as shown on A2.1. For the new walkway at the front, revise sheet note to state: "(E) asphalt walkway with sealcoat and outside edge striped. (Not intended to be an accessible path of travel)." Note, new Detectable Warning Surface at Front Entry Porch shall be flexible truncated domes, Safety Step TD by BC Traffic Specialist or equal adhesive applied to prepared asphalt concrete surface.

7. Q: Detail 1/A10.1 indicates a requirement for an assisted listening system. Will this system be provided by the contractor?

A: No, Assisted Listening System will be provided by the owner, The signage noted will be provided by the contractor.

8. Q: Will the fire alarm system be required to monitor fire sprinkler post indicator valve, flow switch and tamper switch?

A: The fire alarm system shall monitor the fire sprinkler system as noted on the drawings and required by code. The cost for this monitoring shall be included in Alternate A.

9. Q: Is Romex type cable acceptable for new circuits?

A: No, See section 16000 Electrical 2.3 and 2.4 for acceptable wiring options.

10. Q: Is plenum rated cable acceptable for phone/data and fire alarm wiring in walls and attic space?

A: Plenum rated cabling is acceptable for phone/data. All phone/data wire shall be CAT 6; Change Specification Section 16000 Electrical 2.4.A.7 to Category 6. Fire alarm wiring shall be installed per attached specification section 16821 Integrated Fire Alarm System and Smoke Detection System and all applicable codes. Submit Deferred Approval Fire alarm drawing as noted.

11. Q: Is conduit for future solar required?

A: Yes, see sheet EP-1 Item Electrical note 11.5. Provide an empty 1-1/2" conduit with pull string from the existing sub panel to the attic space above.

12. Q: Lighting Retrofit is called out for Alternates B and C, what work is required in the base bid for existing lighting fixtures?

A: Existing fixtures to remain. Remove and clean lenses, replace faulty lamps with owner furnished lamps.

ADDITIONAL INFORMATION

See attached Specification Section 16821 Integrated Fire Alarm System and Smoke Detection System, not originally included in the specifications.

Bidders are reminded that they shall complete the Addenda Acknowledgement in the Bid Form of their Specification Book (Section 00310-2). Failure to do so may result in disqualification of the submitted bid.

SECTION 00020

NOTICE INVITING BIDS

Notice is hereby given that sealed bids will be received at the Executive Office, Facilities and Fleet Division, County of Mendocino, 851 Low Gap Road, Ukiah, California 95482 until the hour of 2:00 p.m., as determined by the clock on the wall of the Facilities and Fleet Division Office, County of Mendocino, on THURSDAY, JANUARY 7TH, 2021 and then publicly opened and read aloud in the Executive Office, Facilities and Fleet Division, County of Mendocino, 851 Low Gap Road, Ukiah, California for the following project:

Mendocino County BID 33-20

Regional Behavioral Health Training Facility Remodel Project

License Required for this Project is: "B" General Building License

Electronic Plans and Documents may be seen or downloaded from the Mendocino County Web Page for Open RFP, Quotes & Bids:

<https://www.mendocinocounty.org/government/executive-office/open-rfp-quotes-bids>.

Additionally plans and documents have been distributed to builder's exchange plan rooms throughout Northern California. For printed plans in Mendocino County, electronic copies of the plans and documents have been supplied to:

Creative Workshop
759 S. State Street
Ukiah, CA 95482
707-468-0251
service@creativeworkshopusa.com

Bids shall be made on a form provided by the County and accompanied by a Certified Check, Cashier's Check, or Bidder's Bond for ten percent (10%) of the amount bid, made payable to the County of Mendocino. The above-mentioned check or Bid Bond shall be given as a guarantee that the Bidder shall execute the contract if it be 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 Instructions to Bidders of the contract documents.

The successful Bidder will be required to furnish a Labor and Material Bond and a Faithful Performance Bond in an amount equal to one hundred percent (100%) of the contract price. Bonds shall each be obtained from a surety company satisfactory to the County of Mendocino.

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

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

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

A MANDATORY pre-bid conference and site inspection will be held on WEDNESDAY DECEMBER 16TH at 9:00 AM at the Project site, 8207 East Side Road, Redwood Valley, California.

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 Section 6.0 – Business Licenses and Regulations, 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.

END OF SECTION

SECTION 00100 INSTRUCTIONS TO BIDDERS

PART 1 – GENERAL

1.1 BIDS RECEIVED

- A. Sealed bids for **Mendocino County BID 33-20 for the Regional Behavioral Health Training Facility Remodel Project** will be received at the Facilities and Fleet Division Office, County of Mendocino, 851 Low Gap Road, Ukiah, California, until 2:00 p.m. as determined by the clock on the wall of the Facilities and Fleet Division Office, on THURSDAY, JANUARY 7TH, 2021 at 2:00 PM, and then publicly opened and read aloud in the Facilities and Fleet Division Office, County of Mendocino.
- B. Late bids will not be accepted. It is Bidder's responsibility to assure that its bid is delivered and received at the location noted above on or before the date and hour set for the bid opening.

1.2 LICENSE REQUIREMENT

- A. The license required for this Project is "B" General Building License.
- B. Pursuant to Mendocino County Code Section 6.0 – Business Licenses and Regulations, at time of contract award, the contractor shall supply a copy of their current County of Mendocino business license.

1.3 SECURING OF PLANS AND DOCUMENTS

Electronic Plans and Documents may be seen at, or downloaded from the Mendocino County Web Page for Bidding Opportunities – Construction: <https://www.mendocinocounty.org/government/executive-office/open-rfp-quotes-bids>

Additionally plans and documents have been distributed to builder's exchange plan rooms throughout Northern California. In Mendocino County, printed plans may be obtained from:

Creative Workshop
759 S. State Street
Ukiah, CA 95482
707-468-0251
service@creativeworkshopusa.com

1.4 BIDS

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

- A. Bids must be submitted on the bid form provided by County, 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. Only written proposals will be permitted.
- C. A Bid Bond or Certified 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. Such guaranty to be forfeited should the Bidder to whom the contract is awarded fail to enter into the contract.

1.5 PRE-BID CONFERENCE AND SITE ACCESS

- A. A MANDATORY pre-bid conference will be held, WEDNESDAY DECEMBER 16TH at 9:00 AM at the site, 8207 East Side Road, Redwood Valley, California. Following the meeting, a site review will be conducted to acquaint Bidders with the Project.
- B. The County reserves the right to schedule an additional mandatory pre-bid conference to ensure adequate bid representation.
- C. Failure to attend at least one of the pre-bid conferences will disqualify a non-attending bidder from the bid.

1.6 SUBCONTRACTORS LISTED

- A. In accordance with California Public Contract Code Sections 4100 et seq., inclusive, each bidder shall provide a list of subcontractors (Section 00430), 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 seq. of the Public Contract Code.
- C. All Bidders must supply with their Bids 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.

1.7 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. 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 County. The competency and dependability of the bidders will be considered when making the award.

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 (a) The lowest bid shall be the lowest bid price on the base contract without consideration of the prices on the additive or deductive items.

(b) 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.

(c) 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.

(d) 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 (a) shall be used to determine the lowest bid.

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.

The award of the contract, if awarded, is expected to be made within thirty (30) days and in no event later than eighty (80) days after the bid opening. After

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.

1.8 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".

1.9 ADDENDUM

Any addendum issued during the time of bidding and before bid opening shall be included in the bid. The addendum issued by 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.

1.10 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. 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.

1.11 WITHDRAWAL OF BID

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

1.12 BONDS

The 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. In addition, the successful Bidder is required to furnish a Bid Bond or Certified Cashier's Check made payable to the County of Mendocino for an amount equal to at least ten percent (10%) of the bid amount. Said Bonds shall be obtained from a surety company satisfactory to County.

1.13 SUBSTITUTIONS

Any substitution shall be made in accordance with instructions contained in Section 01340 – Submittals and Substitutions included herein. Questions concerning substitutions will not be entertained during the bidding period.

1.14 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.

1.15 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 satisfactory 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 sub-proposals 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.

1.16 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.

1.17 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

1.18 AGREEMENT

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

1.19 PRE-CONSTRUCTION CONFERENCE

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

1.20 QUALIFICATIONS OF BIDDERS

- A. The work to be performed under this contract is of a very specialized nature. It is the desire of County to secure the best work attainable and to maintain a very critical and condensed schedule. Bidders considered for 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 the bid documents herein as Section 00120, "Qualification Application".

END OF SECTION

SECTION 00120 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): Adams Commercial General Contracting, Inc.

Circle one: Corporation Partnership Sole Proprietor

Contact Person: Will Adams

Address: 217 E Street, Eureka, CA 95501

Phone: 707-443-6000 Fax: 707-268-8381

If the firm is a sole proprietor or partnership:

Owner(s) of Company: Will Adams

Contractor's License Number(s):

<u>License No.</u>	<u>Classifications</u>	<u>Expiration</u>	<u>Qualifying Individual</u>
875823	B	02/28/2022	Will Adams

DIR Registration Number: 1000000607

Mendocino County Business License No: Mendocino County Business License
application was mailed out on 1/6/2021.
We will send lic # once application is
processed

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
4. Has Contractor's license been revoked at any time in the last five (5) years?
☐ 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

¹ A 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.

PART II. ORGANIZATION, HISTORY, ORGANIZATIONAL PERFORMANCE,
COMPLIANCE WITH CIVIL AND CRIMINAL LAWS

A. Current Organization and Structure of the Business

For firms that are corporations:

- 1a. Date incorporated: _____
1b. Under the laws of the State of: _____
1c. Provide all the following information for each person who is either (a) an officer of the corporation (president, vice president, secretary, treasurer), or (b) the owner of at least ten percent (10%) of the corporation's stock:

Name	Position	Years with Co.	% Ownership	Social Security #

For firms that are partnerships:

- 1a. Date of formation: _____
1b. Under the laws of the State of: _____
1c. Provide all of the following information for each partner who owns ten percent (10%) or more of the firm:

Name	Position	Years with Co.	% Ownership	Social Security #

For firms that are sole proprietorships:

- 1a. Date of commencement of business: _____
1b. Social security number of company owner: _____

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", explain on a separate signed page.

3. Is the firm a subsidiary, parent, holding company, or affiliate of another construction firm?
NOTE: Include information about other firms if one firm owns fifty percent (50%) or more of another, or 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.

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.

Disputes

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. 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 *against* Contractor's firm concerning the firm's work on a construction project been *filed in court or arbitration*?
☐ 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 *filed that claim in court or arbitration*?
☐ 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).

Criminal 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.

Bonding

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 was 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 ☐ 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 workers' compensation insurance carrier.

Current year: _____

Previous year: _____

Year previous to previous year: _____

If Contractor's EMR for any of these three (3) years is or was 1.20 or higher, Contractor may, at its discretion, attach a letter of explanation.

Prevailing Wage and Apprenticeship Compliance Record

23. Provide the name, address and telephone number of the apprenticeship program (approved by the California Apprenticeship Council) from whom Contractor intends to request the dispatch of apprentices to Contractor for use on any public work project for which it is awarded a contract by the County of Mendocino:

SECTION 00306 - 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.

A handwritten signature in cursive script, appearing to read "J. M. H.", is written in the center of the page.

SECTION 00307 - 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)
) ss.
County of Mendocino)

Will Adams _____, being first duly sworn, deposes and says that he or she is Owner of Adams Commercial General Contracting, Inc. the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.



Signature

ACKNOWLEDGMENT

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 that document.

State of California
County of Humboldt)

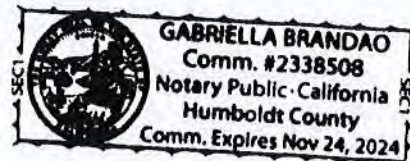
On 11/6/2021 before me, Gabriella Brandao, Notary Public
(insert name and title of the officer)

personally appeared Will Adams
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under 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.

Signature Gabriella Brandao (Seal)



SECTION 00308 - PUBLIC CONTRACT CODE QUESTIONNAIRE

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

Has the Bidder, any officer of the Bidder, or any employee of the Bidder who has a proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on or completing a federal, state, or local government project because of a violation of law or a safety regulation?

☐ Yes

☒ No

If 'yes', explain the circumstances in the space below.

SECTION 00310 - BID FORM FOR MENDOCINO COUNTY

REGIONAL BEHAVIORAL HEALTH TRAINING FACILITY REMODEL

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 sixty (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 General Services Agency 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:

one hundred sixty eight thousand Dollars (\$ 168,276)
two hundred seventy six dollars

ALTERNATES:

See contract documents and Specification Section 01100 for descriptions of Alternate Scope:

Alternate A: Add Fire Protection System:

ADD: one hundred eight thousand Dollars (\$ 108,428)
four hundred twenty eight dollars

Alternate B: Lighting System – Retrofit:

ADD: fourteen thousand Dollars (\$ 14,730)
seven hundred thirty dollars

Alternate C: Lighting System – Replacement and Retrofit:

ADD: nineteen thousand Dollars (\$ 19,154)
one hundred fifty ~~four~~ four dollars

Name of Organization Adams Commercial General Contracting, Inc.

Date Received 1-7-2021

Date Opened 1-7-2021

Initials DE

MEASURE B – REGIONAL TRAINING CENTER

BID FORM

00310-1

SALES TAX

All bids shall include 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 is subsequently proven false, shall be considered nonresponsive and shall be rejected by the public agency.

Name of Organization Adams Commercial General Contracting, Inc.

Type of Organization Corporation
(Corporation, Partnership, etc.)

Address 217 E Street, Eureka, CA 95501

Name of State where incorporated California

CONTRACTORS LICENSE NO. 875823 EXPIRATION DATE 02/28/2022

☒ Contractor has registered with the State of California's DIR (Department of Industrial Relations) website.

DIR Registration #: 1000000607

☐ Contractor is currently licensed to do business in the County of Mendocino.

Mendocino County Business License #: ** Business license application was mailed on 1/6/2021

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: 1

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 

Corporate Seal

SECTION 00430 - SUBCONTRACTORS LISTING FORM**REGIONAL BEHAVIORAL HEALTH TRAINING FACILITY REMODEL**

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.

PORTION OF WORK	SUBCONTRACTOR'S NAME	CONTRACT LIC. DIR REG #	LOCATION
Plumbing	United Plumbing and Mechanical	1000017179 659759	Fortuna
Electrical	Coastal Mountain Electric	507105 1000008522	Clearlake
Casework/ Countertops	Fremont Millwork Co.	249756 1000000246	Kalamath Pulls OK.
Fire Sprinklers/ Underground water	WIPF Construction LLC	629588 1000064006	Ukiah
Site work	Valley Paving	674411 1000008895	Redwood Valley
Pavement Marking	Mendocino Striping	1070403 1000699239	Redwood Valley
Overhead Door	Specialty Dynamics, Inc.	797353 1000022019	Sacramento

BID BOND

Travelers Casualty and Surety Company of America

One Tower Square 3PB, Hartford, CT 06183

Bond No. 73

KNOW ALL MEN BY THESE PRESENTS,

That we, Adams Commercial General Contracting, Inc., as Principal, hereinafter called the Principal, and Travelers Casualty and Surety Company of America, of One Tower Square 3PB, Hartford, CT 06183, a corporation duly organized under the laws of the State of Connecticut, as Surety, hereinafter called the Surety, are held and firmly bound unto County of Mendocino, as Obligee, hereinafter called the Obligee, in the sum of Ten Dollars (\$10%), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for Minor remodeling to Regional Behavioral Health Training Center.

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 4th day of January, 2021.

Adams Commercial General Contracting, Inc.

(Seal)

By:



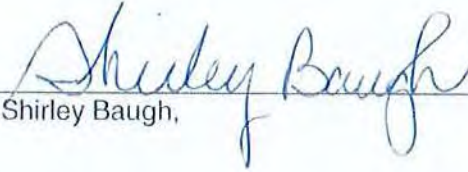
Witness

Principal

Travelers Casualty and Surety Company of America

(Seal)

By:



Witness

Shirley Baugh,

Attorney-in-Fact

Printed in cooperation with the American Institute of Architects (AIA) by Travelers Casualty and Surety Company of America. The language in this document conforms exactly to the language used in AIA Document A310, February 1970 edition.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

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 that document.

State of California)
 County of Sacramento)
 On 1-4-2021 before me, J. Swalley, notary public
 Date Here Insert Name and Title of the Officer
 personally appeared Shirley Baugh
 Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under 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.



Signature [Signature]
 Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Partner — Limited General

☐ Individual Attorney in Fact

☐ Trustee Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Partner — Limited General

☐ Individual Attorney in Fact

☐ Trustee Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____



Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Shirley Baugh**, of **Sacramento, California**, their true and lawful Attorney-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law


IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed. This **3rd** day of **February**, 2017.



State of Connecticut

City of Hartford ss.

By



Robert L. Raney, Senior Vice President

On this the **3rd** day of **February**, 2017, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal

My Commission expires the **30th** day of **June**, 2021




Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is


FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary, or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority, and it is

FURTHER RESOLVED, that the signature of each of the following officers, President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect

Dated this **4th** day of **January**, 2021




Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney-in-Fact and the details of the bond to which the power is attached.

ACKNOWLEDGMENT

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 that document.

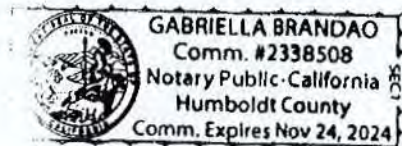
State of California
County of Humboldt)

On 11/21/2024 before me, Gabriella Brandao, Notary Public
(insert name and title of the officer)

personally appeared Will Adams
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under 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.



Signature [Handwritten Signature] (Seal)

SECTION 00501 - 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 1/6/20

Contractor Signature 

SECTION 00510 - CONTRACTOR GUARANTEE

FOR REGIONAL BEHAVIORAL HEALTH TRAINING FACILITY REMODEL

Contractor hereby guarantees that the labor and material furnished for this project is in accordance with the drawings and specifications. 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. Contractor shall honor and pay the costs and charges therefore upon demand.

SIGNED _____

COUNTERSIGNED _____

CONTRACTOR _____

DATED _____

DATE OF BUILDING ACCEPTANCE _____

SECTION 00650 - CONSTRUCTION SITE STORM WATER POLICY

PART I – GENERAL

1.1 SUMMARY

- A. Mendocino County Ordinance No. 4313 STORM WATER RUNOFF POLLUTION PREVENTION PROCEDURE (Mendocino County Code Chapter 16.30 et.seq.) requires any person performing construction and grading work anywhere in the county shall implement appropriate Best Management Practices (BMP) to prevent the discharge of construction waste, debris, sediment or contaminants from construction materials, tools and equipment from entering the storm drainage system or natural waterways (off-site).
- B. By commencing work in this contract, the contractor agrees to comply with Mendocino County Code Section 16.30.140 Inspection and monitoring. The County may enter the worksite whenever necessary to perform inspections related to the Storm Water Runoff Pollution Prevention Procedures for the project including inspection of BMP's and records relating to storm water plan compliance.

1.2 SUBMITTALS

- A. Prior to beginning construction activities, submit construction site Best Management Practice (BMP) Plans and Specifications prepared by a Qualified Storm Water Developer (QSD) or the Contractor referencing Mendocino County Building and Planning Services Documents noted below:
 - 1. Construction Best Management Practices for over-the-counter building permits for projects that do not disturb any soil.
 - 2. Small Construction Site Storm Water Erosion and Sediment Control Plan Template for projects that will disturb any soil.
- B. Submittal shall include a project specific BMP plan for all areas of soil disturbance and possible contamination source generated by the project. Attach copies of the relevant current BMP fact sheets from the California Storm Water BMP Handbook Portal planned to address each potential source of contamination generated by the project.
- C. A County approved BMP plan is required prior to beginning work on the project.

Part 2 – PRODUCTS

2.1 MATERIALS

- A. Provide Materials in Compliance with Approve BMP fact sheets in appropriate quantities to mitigate possible runoff, sedimentation and/or contamination in accordance with the approved BMP plan.

Part 3 – EXECUTION

3.1 PREPARATION

- A. Prepare BMP schedule to identify dates when BMP's will be installed.
- B. Ensure that BMP Materials are on site in the event of an untimely rain event and prior to October 15th.
- C. Identify and mark Storm Drain Inlets and drainage features leading to storm drains or natural waterways.
- D. Identify and provide instruction and training to on site personnel responsible for installation and management of BMP's.

3.2 INSTALLATION

- A. Complete BMP installation Prior to October 1st or prior to ground disturbance activities between October 1st and April 15th, and call the project manager for an inspection of the installed BMP plan. Do not start grading activities without BMP's in place.
- B. Comply with installation guidelines included with BMP fact sheets and suitable to site conditions.
- C. Remove Contamination and Sediment BMP's after sources of sedimentation, or contamination have been removed from the site or final soil stabilization is complete. Do not remove Erosion Control BMP's until permanent Erosion Control features are established unless directed by the County.

3.3 INSPECTION

- A. Prior to significant rain events It is the responsibility of the Contractor to provide regular inspection of BMP's throughout the rainy season. Maintain and replace all BMP's in accordance with the approve BMP plan., inspect installed BMP's to ensure all potential sources of contamination, sedimentation or erosion are protected by approved BMP's.
- B. During significant rain events verify that installed BMP's are adequate to the flows on the project site.
- C. Record inspection findings as required by approved BMP plan.
- D. Maintain Inspection records and a copy of the approved BMP plan on the project

site for inspection by County and NCWRCB.

- E. Failure of the Contractor to comply with the requirements of these specifications and the provisions of the approved Storm Water pollution Prevention Plan or BMP plan may result in work stoppage, a written citation, monetary fine or any combination thereof.

END OF SECTION

SECTION 007000 - GENERAL CONDITIONS

I. 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:
 - A.W.S. American Welding Society
 - A.S.T.M. American Society for Testing Materials
 - A.S.A. American Standard Association
 - N.B.F.U. National Board of Fire Underwriters
 - N.B.S. National Bureau of Standards
 - A.S.M.E. American Society of Mechanical Engineers
 - A.R.I. American Refrigeration Institute
 - N.E.M.A. National Electrical Manufacturers Association
 - U.L. Underwriter's Laboratories
 - E.T.L. Electrical Testing Laboratories
 - A.C.I. American Concrete Institute
 - F.A. Federal Specifications
 - A.I.S.C. American Institute of Steel Construction
- 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 extra work authorized.
- 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

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. Contractor shall at all times conduct his work so as to impose no hardship on the County or others engaged in the work. 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 shall 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 where 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

MEASURE B – REGIONAL TRAINING CENTER
GENERAL CONDITIONS

- 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 insuring 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.

Contractor shall furnish to 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

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 thing 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;
 - c. 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 a 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.

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 so 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 collect.

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 review 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 submit a substitution 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. INCOMPETENT WORKERS

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 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 any one (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. Each sheet of the "Record" drawings shall be identified with the following label to be signed by the Contractor:

These are record drawings which have been
prepared or supervised by the undersigned.

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 insure 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. Contractor shall insure 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 008110 - UNFORESEEN PHYSICAL CONDITIONS

PART I – GENERAL

I.1 SUMMARY

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

I.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:

1. Material that 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. Archaeological or historical artifacts or soils conditions identified with such artifacts as noted in the conditions of approval from the California Department of Parks and Recreation CEQA Document No. 11293 – Archaeological Review.
4. 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 01010, "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 the proximity where indicated in or reasonably interpreted from the

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UNFORESEEN PHYSICAL CONDITIONS

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Contract Documents or Reference Documents.

- C. County will promptly investigate the conditions reported which appear to be unforeseen conditions.
1. If 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.
 2. 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, a Contract Modification will be issued for compensation of such portion of the work as provided in the General Conditions.
 3. If County determines that the conditions are hidden or differing conditions and that they will materially affect the performance time, 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.
 3. 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 General Conditions Section 00700, Article 20 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:
 - 1. 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.

1.4 WORK STOPPAGES FOR HISTORICAL OR ARCHAEOLOGICAL FINDS

- A. CONTRACTOR shall not be entitled to any adjustment in the Contract Sum for reasonable accommodations required to comply with the conditions of approval.
- B. Work stoppages required and any special excavation requested by the Archaeological monitor will be compensated under the provisions of article 7 of the General Conditions.

PART 2 - PRODUCTS
NOT USED

PART 3 - EXECUTION
NOT USED

END OF SECTION

HIDDEN CONDITIONS REPORT (HCR)

Regional Behavioral Health Training Center - Flooring Project

HCR No. _____

Submitted By: _____ Date: _____

Ctr to PM

PM to Arch

Arch to PM

PM to

Ctr

Date Sent: _____

Date Received: _____

Type of Conditions Reported:

☐ Site Work

☐ Structural

☐ Architectural

☐ HVAC

☐ Plumbing

☐ Fire Protection

☐ Electrical

☐ Other

Location and Reference to Drawing: _____

Conditions Reported: _____

Investigated By: _____ Firm: _____ Date: _____

☐ Check this box if the hidden condition reported is not hidden. Reply with location(s) where the information can be obtained.

Reply of Findings: _____

By: _____ Firm: _____ Date: _____

The reply is a finding from the investigation. No change in the Contract Sum or Time is authorized. See Specifications Document 00811 for the timeliness of investigation.

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

- 1.1 REQUIREMENTS of the drawings and general provisions of the Prime Construction Agreement and other sections of Division 1 apply to this section.
- 1.2 THIS SECTION sets forth general project scope, and general provisions regarding work to be performed by the Contractor.
- 1.3 THE WORK OF THIS CONTRACT consists of:

WORK INCLUDED: Provide all construction documentation, labor, material, superintendence and administration as depicted in the drawings, as described in the project manual or as necessary for a complete and proper turnkey fabrication and installation. Present to the Owner, at the close of construction, signed copies of all required permits indicating successful completion of all permit requirements.

1.4 APPLICABLE CODES AND REGULATIONS:

- A. General Requirements: All materials and workmanship shall comply with the most recent edition of the California Code of Regulations (CCR), Title 24 (California Building Standards Code) with current State and local amendments. CCR, Title 24 consists of the following twelve parts:

- Part 1 - California Building Standards Administrative Code
- Part 2 - California Building Code
- Part 3 - California Electrical Code
- Part 4 - California Mechanical Code
- Part 5 - California Plumbing Code
- Part 6 - California Energy Code
- Part 7 - (No longer published in Title 24. See Title 8, CCR)
- Part 8 - California Historical Building Code
- Part 9 - California Fire Code
- Part 10 - California Existing Building Code
- Part 11 - California Green Building Standards Code (CALGreen)
- Part 12 - California Reference Standards Code

- B. Energy Requirements: All materials and workmanship shall comply with the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Building Energy Efficiency Standards published by the California Energy Commission.
 - C. Grading and Paving Requirements: All materials and workmanship shall comply with the California Department of Transportation Standard Specifications dated May 2006 and the State of California Department of Transportation Standard Plans dated May 2006 for earthwork, grading and paving.
 - D. Air Quality Requirements: All materials and workmanship shall comply with all current requirements of the Mendocino County Air Quality Control District. Provide all application materials, fees and documentation necessary to obtain all permits required by the Mendocino County Air Quality Control District. Obtain approval for all operations and present to the Owner, at the close of construction,
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signed copies of all required permits indicating successful completion of all permit requirements.

- E. Accessibility Requirements: All materials and workmanship shall comply with all the requirements for accessibility as set forth in the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Federal Americans with Disabilities Act in effect at the time of construction.
- F. California Department of Forestry and Fire Protection (Cal Fire) Requirements: All materials and workmanship shall comply with Cal Fire "SRA Fire Safe Regulations", Title 14 - Natural Resources, California Code of Regulations, Division 1.5 - Dept. of Forestry, Chapter 7 - Fire Protection, Subchapter 2 - SRA Fire Safe Regulations, Articles 1-5.
- G. Fire Alarm System: The proposed facility shall have an integrated fire alarm system in conformance with all requirements for fire alarm systems as set forth in the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the National Fire Protection Association Standard 72.
- H. Recycling Requirements: This project is subject to the Mendocino County "Construction and Demolition Recycling and Reuse" Ordinance and the Department of Toxic Substances Control "Requirements for Generators of Treated Wood Waste," and the requirements of California Green Building Standards Code (CALGreen).
- I. Other Requirements: All materials and workmanship shall comply with the most recent edition of any other codes or regulations adopted by governmental agencies having jurisdiction over any portion of the work.

1.5 PROJECT DATA:

- A. Construction Type: The proposed facility shall conform to all requirements for Type V-B construction as set forth in the most current edition of the California Building Code in effect at the time of construction with current State and local amendments.
- B. Occupancy Classification: The proposed facility shall conform to all requirements for Group A-3 (Assembly) Occupancy as set forth in the most current edition of the California Building Code in effect at the time of construction with current State and local amendments.

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION (not applicable)

SECTION 01021 - ALLOWANCES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: To provide adequate budget and bonding to cover items not precisely determined by the Owner prior to bidding, allow within the proposed Contract Sum the amounts described below.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. Other provisions concerning Cash Allowances are stated in Paragraph 3.8 of the General Conditions.
 - 3. Other provisions concerning Cash Allowances also may be stated in other Sections of these Specifications.

1.2 SPECIFIC CASH ALLOWANCES

- A. Some Electrical Light Fixtures (materials only): Specific Surface mounted electrical light fixtures identified on the light fixture Schedule on Sheet EMI of the Drawings. Where light fixtures are provided under this allowance, the amount allowed for fixtures of each type is given on the Light Fixture Schedule. (Contractor shall provide all junction boxes, outlets, switches, dimmer switches, meters, panel boxes, wiring runs, circuit breakers, plate covers, rough-in cans, light bulbs, any other materials and all labor for complete and proper installation of these items.)

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION (not applicable)

SECTION 01050 - FIELD ENGINEERING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide such field engineering services as are required for proper completion of the Work including but not necessarily limited to:
 - 1. Establishing and maintaining lines and levels;
 - 2. Structural design of shores, forms, and similar items provided by the Contractor as part of his means and methods of construction.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. Additional requirements for field engineering also may be described in other Sections of these Specifications.
 - 3. As described in subparagraph 2.2.3 of the General Conditions, the Owner will furnish survey describing the physical characteristics, legal limitations, utility locations, and legal description of the site.

1.2 QUALITY ASSURANCE:

Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section

1.3 SUBMITTALS:

- A. Comply with pertinent provisions of Section 01340 - Submittals and Substitutions.
- B. Upon request of the Architect, submit:
 - 1. Data demonstrating qualifications of persons proposed to be engaged for field engineering services.
 - 2. Documentation verifying accuracy of field engineering work.
 - 3. Certification, signed by the Contractor's retained field engineer, certifying that elevations and locations of improvements are in conformance or non-conformance with requirements of the Contract Documents.

1.4 PROCEDURES

- A. In addition to procedures directed by the Contractor for proper performance of the Contractor's responsibilities:
1. Locate and protect control points before starting work on the site.
 2. Preserve permanent reference points during progress of the Work.
 3. Do not change or relocate reference points or items of the Work without specific approval from the Architect.
 4. Promptly advise the Architect when a reference point is lost or destroyed, or requires relocation because of other changes in the Work.
 - a. Upon direction of the Architect, require the field engineer to replace reference stakes or markers.
 - b. Locate such replacements according to the original survey control.

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION (not applicable)

SECTION 01100 - ALTERNATIVES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide Contract segment and alternative bid proposals as described in this Section.
- B. Related work:
 - 1. Documents affecting work of this Section include but are not necessarily limited to General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. Some of the items mentioned in this Section are further described in pertinent other sections of these Specifications.
- C. Procedures:
 - 1. Provide alternative bid to be deducted from or added to the amount of the Base Bid if the corresponding change in the scope is accepted by the Owner.
 - 2. Include within the alternative bid prices all costs including materials, installations, and fees.
 - 3. Show the proposed alternative amounts opposite their proper description on the Bid Form.

1.2 SPECIFIC ALTERNATIVES

A. FIRE PROTECTION SYSTEM:

Provide an install all materials and labor for a complete and proper, code compliant, fire protection sprinkler system, including but not limited to the following, fire water connection to existing water supply system, all delivery equipment, all fire protection water supply piping, all fire sprinkling equipment, all related alarm systems as needed, and connections to the proposed Fire Alarm and Smoke / CO Detection System. See Sheet FP1, Specification Section 15320 Fire Protection Sprinkler System and Specification Section 16821 Integrated Fire Alarm and Smoke / CO Detection System. Note, Fire Alarm and Smoke / CO Detection System is included in the Base Bid for the project.

B. LIGHTING SYSTEM – RETROFIT:

Provide an install all materials and labor for a complete and proper, code compliant, retrofit lighting system, including but not limited to the following,

1. Vestibule: Remove existing ballast and retrofit with LED Shunted sockets. 1 each, 3 tube fixtures
2. Assembly Area: Remove existing ballast and retrofit with LED Shunted sockets. 20 each, 3 tube fixtures
3. Men's Restroom: 3 each Led lamp retrofits. A19 60 watt equivalents.
4. Women's Restroom: Provide 2 ea New wall mount fixtures. See EM1, Lighting Fixture Schedule.
5. Multi-purpose Room: Remove existing ballast and retrofit with LED Shunted sockets. 2 each, 3 tube fixtures.
6. Utility Room: Remove existing ballast and retrofit with LED Shunted sockets. 1 each, 3 tube fixtures
7. Stage: 5 each LED R30 flood light retrofit. 60W equivalent and Remove existing ballast and retrofit with LED Shunted sockets. 2 each, 3 tube fixtures
8. Stage North: Remove existing ballast and retrofit with LED Shunted sockets. 2 each, 3 tube fixtures.
9. Stage South: Remove existing ballast and retrofit with LED Shunted sockets. 2 each 3 tube fixtures.
10. Provide and install new 3000K lamps, typical.
11. Field verify lighting fixture placement, count and all requirements.

C. LIGHTING SYSTEM – REPLACEMENT and RETROFIT:

Provide an install all materials and labor for a complete and proper, code compliant, retrofit lighting system, including but not limited to the following,

1. All existing 12" x 48" surface mounted light fixtures:
Remove and replace with new Maxim Lighting, Sky Panel #57764WTWT or Equal, 11.75" x 48" x 0.75", 45 W LED, Dimmable, 3000K CRI, White finish, White Translucent glazing.
2. All existing 12" x 24" surface mounted light fixtures:
Remove and replace with new Maxim Lighting, Sky Panel #57762WTWT or Equal, 11.75" x 23.5" x 0.75", 22 W LED, Dimmable, 3000K CRI, White finish, White Translucent glazing.

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ALTERNATIVES

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3. Men's Restroom: 3 each Led lamp retrofits. A19 60 watt equivalants.
4. Women's Restroom: Provide 2 ea New wall mount fixtures. See EM1, Lighting Fixture Schedule.
5. Stage: 5 each LED R30 flood light retrofit. 60W equivalent.
6. Provide and install new 3000K lamps, typical.
7. Field verify lighting fixture placement, count and all requirements.
8. Provide and install new exterior wall mounted light fixtures with photo-control.

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION (not applicable)

SECTION 01340 -SUBMITTALS AND SUBSTITUTIONS

PART 1 - GENERAL

- 1.1 THIS SECTION includes all required submittals where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.
- 1.2 QUALITY ASSURANCE:
 - A. Coordination of submittals:
 - 1. Prior to each submittal, carefully review and coordinate all aspects of each item being submitted.
 - 2. Verify that each item and the submittal for it conform in all respects with the specified requirements.
 - 3. By affixing the Contractor's signature to each submittal, certify that this coordination has been performed.
 - B. "Or equal"
 - 1. Where the phrase "or equal" or "or equal as approved by the Architect" occurs in the Contract Documents, do not assume that the materials, equipment, or methods will be approved as equal unless the item has been specifically so approved for this Work by the Architect.
 - 2. The decision of the Architect shall be final.
- 1.3 SUBMITTALS
 - A. Make submittals of Shop Drawings, Samples, substitution requests, and other items in accordance with the provisions of this Section.

PART 2 - PRODUCTS

- 2.1 SHOP DRAWINGS
 - A. Scale and measurements: Make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the Work.
 - B. Types of prints required:
 - 1. Submit Shop Drawings in the form of two (2) blueline, blackline, or copy prints of each sheet.
- 2.2 MANUFACTURERS' LITERATURE
 - A. Where contents of submitted literature from manufacturers includes data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review.

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SUBMITTALS AND SUBSTITUTIONS

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- B. Submit the number of copies which are required to be returned, plus one copy which will be retained by the Architect.

2.3 SAMPLES

- A. When required by the Architect, provide Sample or Samples identical to the precise article proposed to be provided.
- B. Number of Samples required:
 - 1. Unless otherwise specified, submit Samples in the quantity which is required to be returned, plus one which will be retained by the Architect.
 - 2. By prearrangement in specified cases, a single Sample may be submitted for review and, when approved, be installed in the Work at a location agreed upon by the Architect.

2.4 COLORS AND PATTERNS

- A. Unless the precise color and pattern is specifically called out in the Contract Documents, and whenever a choice of color or pattern is available in the specified products, submit accurate color and pattern charts to the Architect for selection.

PART 3 - EXECUTION

3.1 ARCHITECT'S REVIEW

- A. Review by the Architect is for conformance with the Design Concept only. The Contractor shall be responsible for verifying that all submitted products and systems meet all code requirements and specified Quality Standards.
- B. Review by the Architect does not relieve the Contractor from responsibility for errors which may exist in the submitted data.
- C. Revisions:
 - 1. Make revisions required by the Architect.
 - 2. Resubmit revised submittals to the Architect for review.
- D. Distribution: Contractor shall distribute copies of approved submittals to all affected subcontractors and forward two approved copies to the Owner.

SECTION 01500 - TEMPORARY FACILITIES & CONTROLS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Provide temporary facilities and controls need for the Work including, but not necessarily limited to:
 - 1. Temporary utilities such as heat, ventilation, water, electricity, lighting, telephone and fax;
 - 2. Field office for the Contractor's personnel;
 - 3. Sanitary facilities;
 - 4. Enclosures such as tarpaulins, barricades, and canopies;
 - 5. Temporary fencing of the construction site;
 - 6. Project sign.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary conditions, and Sections in Division 1 of these Specifications.
 - 2. Except that equipment furnished by subcontractors shall comply with requirements of pertinent safe regulations, such equipment normally furnished by the individual trades in execution of their own portions of the Work are not part of this Section.
 - 3. Permanent installation and hookup of the various utility lines are described in other Sections.

1.2 JOB SAFETY

- A. 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 so conduct his work as to cause the least possible obstruction and inconvenience and insure the protection of persons and property in the vicinity of the Work.

PART 2 - PRODUCTS

2.1 UTILITIES

A. Electricity and Lighting:

1. Contractor shall make necessary arrangements, obtain and pay for all necessary permits and provide, maintain and pay for temporary electrical power drop from the existing power pole located near the Southwest corner of the property or other Architect approved location, meter and temporary wiring. Upon completion of the Work, remove all such temporary facility.
2. Provide and pay for electricity used in construction.
3. Provide area distribution boxes so located that the individual trades may furnish and use 100 ft. maximum length extension cords to obtain power and lighting at points where needed for work, inspection, and safety.
4. Provide and maintain lighting for construction operations to achieve a minimum lighting level of 1 watt/sq.ft.

B. Heating and Ventilation:

1. Contractor shall provide, maintain and pay for heat and heating fuel necessary for proper conduct of operations needed in the Work.
2. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors or gases.

C. Telephone and Fax:

1. Make necessary arrangements, provide, maintain and pay costs for installation and operation of telephone and fax service to the Contractor's office at the site. Provide and pay for telephone and fax machine.
2. Make the telephone and fax available to the Architect for use in connection with the Work.

D. Water:

1. Contractor shall make necessary arrangements, obtain and pay for all necessary permits and provide, maintain and pay for a hydrant meter and all suitable quality water service materials required.
2. Extend branch piping with outlets located so water is available by hoses with threaded connections. Provide temporary pipe insulation to prevent freezing.

MEASURE B – REGIONAL TRAINING CENTER
TEMPORARY FACILITIES & CONTROLS

2.2 FIELD OFFICE AND SANITARY FACILITIES

A. Field Offices:

1. Provide, maintain and pay for field office, weather tight with lighting, electrical outlets, heating, cooling and ventilating equipment and equipped with sturdy furniture drawing rack and drawing display table.

B. Sanitary facilities:

1. Provide and pay for temporary sanitary facilities in quantity required for use by all personnel.
2. Maintain in a sanitary condition at all times.

2.3 ENCLOSURES

A. General: Provide and maintain for the duration of construction all scaffolds, tarpaulins, canopies, warning signs, steps, platforms, bridges, and other temporary construction necessary for proper completion of the Work in compliance with pertinent safety and other regulations.

B. Exterior: Provide temporary, insulated, weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specifications Sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

C. Interior: Provide non-combustible, one-hour fire rated temporary partitions and ceilings as required to separate work areas from Owner occupied areas, to prevent penetration of dust and moisture into Owner occupied areas, and to prevent damage to existing materials and equipment.

2.4 FENCING

A. Provide six-foot high chain link fencing equipped with vehicular and pedestrian gates to prevent unauthorized entry to construction areas, and to protect existing facilities and adjacent properties from damage from construction operations and demolition. Contractor to provide master keyed locks. Provide Owner with two copies of master key. Provide Architect with two copies of master key.

MEASURE B – REGIONAL TRAINING CENTER TEMPORARY FACILITIES & CONTROLS

- B. Provide protection for plant material designated to remain. Replace damaged plant material in size and kind.
- C. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

2.5 MISCELLANEOUS FACILITIES

- A. Construction Aids: Hoists, ramps and ladders, enclosures, pumps, barriers, fences, barricades necessary to adequately move materials and equipment, de-water excavations, and to protect workmen and public.
- B. All temporary construction to comply with requirements of state and local authorities.

2.6 SECURITY:

- A. Provide security and facilities to protect the Work, and existing facilities, and Owner's operations from unauthorized entry, vandalism, fire and theft until Work is fully accepted by Owner.
- B. Coordinate with Owner's security program.

2.7 PRODUCT SIGNS

- A. Prior to start of construction, secure from the Architect and Engineer at their offices, one of the Architect's and one of the Engineer's standard job signs. Mount signs at the job site where directed by the Architect and Engineer.
- B. Upon completion of the Work, demount the Architect's job sign and return to the Architect's office. Return mounting location to original condition.

2.8 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification Sections.
- B. Provide temporary and removable protection for installed Products. Control activity in immediate work areas to minimize damage.
- C. Provide protective coverings at walls, projections, jambs, sills and soffits of openings.

MEASURE B – REGIONAL TRAINING CENTER
TEMPORARY FACILITIES & CONTROLS

- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

2.9 ACCESS ROADS

- A. Construct and maintain temporary roads accessing public thoroughfares to serve construction area.
- B. Extend and relocate as Work progress requires. Provide detours necessary for unimpeded traffic flow.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Designated existing on-site roads shall not be used for construction traffic.

PART 3 - EXECUTION

3.1 MAINTENANCE AND REMOVAL

- A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the Work.
- B. Remove such temporary facilities and controls as rapidly as progress of the Work will permit or as directed by the Architect.
- C. Remove temporary above grade or buried utilities, equipment, facilities, materials prior to Substantial Completion inspection.
- D. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- E. Clean and repair damage caused by installation or use of temporary work.
- F. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

SECTION 01640 - PRODUCT HANDLING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Products scheduled for use in the Work by means including, but not necessarily limited to those described in this Section.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. Additional procedures also may be prescribed in other Sections of these Specifications.

1.2 QUALITY ASSURANCE

Include within the Contractor's quality assurance program such procedures as are required to assure full protection of work and materials.

1.3 MANUFACTURERS' RECOMMENDATIONS

Except as otherwise approved by the Architect, determine and comply with manufacturers' recommendations on product handling, storage, and protection.

1.4 PACKING

- A. Deliver products to the job site in their manufacturer's original container, with labels intact and legible.
 - 1. Maintain packaged materials with seals unbroken and labels intact until time of use.
 - 2. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the Owner.
- B. The Architect may reject as non-complying such material and products that do not bear identification satisfactory to the Architect as to manufacturer, grade, quality, and other pertinent information.

1.5 PROTECTION

- A. Maintain finished surfaces clean, unmarred, and suitably protected until accepted by Owner.

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PRODUCT HANDLING

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1.6 REPAIRS AND REPLACEMENTS

- A. In event of damage, promptly make replacements and repair to the approval of the Architect and at no additional cost to the Owner.
- B. Additional time required to secure replacements and to make repairs will not be considered by the Architect to justify an extension of the Contract Time of Completion.

1.7 OWNER SUPPLIED ITEMS

- A. Certain items described in the Supplementary Conditions shall be furnished by the Owner. The Owner shall arrange to have some items delivered to the jobsite.
- B. When deliveries of Owner supplied items are made, the Contractor shall examine the items carefully and accept only those items which are undamaged.
- C. Check invoices of Owner supplied items carefully. Acceptance by the Contractor of the delivery of Owner supplied items, as indicated by a signed invoice, shall be proof that all items listed on the invoice are included within the shipment and that all items are in undamaged condition.
- D. After items supplied by the Owner are accepted by the Contractor, all handling and storage of such items shall be solely the Contractor's responsibility.

SECTION 01650 - STARTING OF SYSTEMS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Starting of systems, demonstration and instructions, testing, adjusting and balancing.

1.2 STARTING SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems;
- B. Notify Architect and Owner seven days prior to start-up of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or other conditions which may cause damage.
- D. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of responsible Contractors' personnel in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report that equipment or system has been properly installed and is functioning correctly.

1.2 DEMONSTRATION' AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.

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STARTING OF SYSTEMS

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- C. Utilize operation and maintenance manuals as basis for instruction.
Review contents of manual with Owners' personnel in detail to explain all aspects of operation and maintenance.
- D. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled times, at designate location.
- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

1.3 TESTING, ADJUSTING, AND BALANCING

- A. Contractor shall employ services of an independent firm to perform testing, adjusting and balancing. Contractor shall pay for services.
- B. The independent firm will perform services specified in Division 15 Specifications Sections.
- C. Reports will be submitted by the independent firm to the Architect indicating observations and results of tests and indicating compliance or non-compliance with specified requirements and with the requirements of the Contract Documents.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

SECTION 01700 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Closeout procedures, Final cleaning, Adjusting, Project record documents, Operation and maintenance data, Warranties, Spare parts and maintenance materials, Summary of closeout submittals to Architect.

1.2 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect's inspection.
- B. Provide submittals to Architect that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- D. Comply with procedures stated in the Conditions of the Contract Agreement and General Conditions for issuance of Certificate of Substantial Completion.
- E. Should Architect consider that the Work' is incomplete or defective, he will promptly notify the Contractor in writing, listing the incomplete or defective items. The Contractor shall then take immediate steps to remedy the stated deficiencies, and send a second written certification to Architect that the Work is complete.
- F. Should Architect perform reinspections due to failure of the Work to comply with the claims of status of completion made by the Contractor:
 - 1. Owner will compensate Architect for such additional services.
 - 2. Owner will deduct the amount of such compensation from the final payment to the Contractor.
- G. When the Architect finds that the Work is acceptable under the Contract Documents, he shall request the Contractor to make closeout submittals.

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H. Architect will issue a final change order reflecting approved adjustments to Contract Sum not previously made by Change Order.

1.3 FINAL CLEANING

A. Execute final cleaning prior to final inspection.

B. Clean interior and exterior glass and surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.

C. Clean equipment and fixtures to a sanitary condition.

D. Replace filters of operating equipment.

E. Clean debris from roofs, gutters, downspouts, and drainage systems.

F. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.4 ADJUSTING

Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.5 PROJECT RECORD DOCUMENTS

A. Maintain on site, one set of the following record documents; record actual revisions to the Work:

1. Contract Drawings.
2. Specifications.
3. Addenda.
4. Change Orders and other Modifications to the Contract.
5. Reviewed shop drawings, product data, and samples.

B. Store Record Documents separate from documents used for construction. Label each document "Project Record" in neat large printed letters.

C. Record information concurrent with construction progress.

1. Do not conceal any Work until required "as-built" information is recorded.
2. Recording and marking shall be legible using ink.

D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:

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CONTRACT CLOSEOUT

1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda and Modifications.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
1. Measured depths of foundations in relation to finish main floor datum.
 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 4. Field changes of dimension and detail.
 5. Details not on original Contract Drawings.
- F. Submit documents to Architect with claim for final Application for Payment.

1.6 OPERATION AND MAINTENANCE DATA

- A. Compile data and related information appropriate for Owner's maintenance and operation of products furnished under the Contract.
- B. Submit three sets prior to final inspection, bound in 8-1/2 x 11 inch text pages, three D side ring capacity expansion binders with durable plastic covers.
- C. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
- D. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- E. Contents: Prepare a Table of Contents for each volume, with each Product or system description identified, type on 24 pound white paper.
- F. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major equipment suppliers.
- G. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:

1. Significant design criteria.
2. List of equipment.
3. Parts list for each component.
4. Operating instructions.
5. Maintenance instructions for equipment and systems.
6. Maintenance instructions for special finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.

H. Part 3: Project documents and certificates, including the following:

1. Shop drawings and product data.
2. Air and water balance reports.
3. Certificates.
4. Photocopies of warranties.

I. Submit one copy of completed volumes in final form 15 days prior to final inspection. This copy will be returned after final inspection, with Architect comments. Revise content of documents as required prior to final submittal.

J. Submit final volumes revised, within ten days after final inspection.

1.7 WARRANTIES

- A. Provide duplicate copies.
- B. Execute Contractor's submittals and assemble documents from Subcontractors, suppliers, and manufacturers.
- C. Provide Table of Contents and assemble in three D side ring binder with durable plastic cover.
- D. Submit prior to final Application for Payment.
- E. For items of Work delayed-beyond date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

1.8 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.
- B. Deliver to Project site and place in location as directed; obtain receipt prior to final payment.

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CONTRACT CLOSEOUT

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1.9 SUMMARY OF CLOSEOUT SUBMITTALS TO ARCHITECT

- A. Evidence of compliance with requirements of governing authorities:
 - 1. Certificate of Occupancy.
 - 2. Certificates of Inspection.
- B. Project Record Documents; To requirements of this Section.
- C. Operation and Maintenance Data: To requirements of this Section.
- D. Spare Parts and Maintenance Materials: Evidence of compliance with this Section.
- E. Warranties: To requirements of this Section.
- F. Keys and Final Keying Schedule: To requirements of Section 08710 - Finish Hardware.
- G. Evidence of Payment and Release of Liens in compliance with the Conditions of the Contract Agreement and the General Conditions.
- H. Consent of Surety to Final Payment.
- I. Certificates of Insurance for Products and Complete Operations: In accordance with the Supplementary Conditions, Conditions of the Contract Agreement, and General Conditions.
- J. Final Application for Payment: To requirements of the Conditions of the Contract Agreement, and General Conditions.

1.10 FINAL PAYMENT

- A. When, in the opinion of the Architect, the project is complete (NOTE: evaluation after inspection) the Architect will advise the Owner and the Owner will file the Notice of Completion with the County Recorder.
- B. Should there be items not available due to delays in delivery, or should work remain incomplete the Architect and the Owner may require the Contractor to post a certified check in an agreed upon amount sufficient to cover such incomplete or uncorrected items. Such certified check shall be held until completion of all incomplete Work.
- C. The 10% retention shall be held by the Owner until Forty (40) days after Final Acceptance and filing of the notice of Completion with the County Recorder. If no liens or encumbrances are filed and if all work

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CONTRACT CLOSEOUT

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in complete, the retention shall be paid the Contractor. Assessed liquidated damages shall be deducted from the retention.

D. Final payment to the Contractor will not be made until the Owner and Architect receive a signed-off final copy of the Building Permit.

PART 2 PRODUCTS

(Not used)

PART 3 EXECUTION

(Not used)

SECTION 01710 - CLEANING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Throughout the construction period, maintain the buildings and site in a standard of cleanliness as described in this Section.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
 - 2. In addition to standards described in this Section, comply with requirements for cleaning as described in pertinent other Sections of these Specifications.

1.2 QUALITY ASSURANCE

- A. Conduct daily inspection, and more often if necessary, to verify that requirements for cleanliness are being met.
- B. In addition to the standards described in this Section, conduct cleaning and disposal operations to comply with pertinent requirements of governmental agencies having jurisdiction.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS AND EQUIPMENT

- A. Provide required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.
- B. Provide covered containers for deposit of waste materials, debris and rubbish.
- C. Locate containers for deposit of waste materials, debris and rubbish within the fenced construction site or as directed by owner.

2.2 COMPATIBILITY

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.

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- B. Use only the cleaning materials, methods and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.1 PROGRESS CLEANING

A. General:

1. Retain stored items in an orderly arrangement allowing maximum access, not impeding traffic or drainage, and providing required protection of materials.
2. Do not allow accumulation of scraps, debris, waste material, and other items not required for construction of this Work.
3. At least twice each month, and more often if necessary, completely remove all scrap, debris, and waste material from the job site.
4. Provide adequate storage for all items awaiting removal from the job site, observing requirements for fire protection and protection of the ecology.

B. Site:

1. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
2. Weekly, and more often if necessary, inspect all materials stored on the site. Restack, tidy, or otherwise service arrangements to meet the requirements of subparagraph 3.1-A-1 above.
3. Maintain the site in a neat and orderly condition at all times.

C. Structures:

1. Weekly, and more often if necessary, inspect the structures and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
2. Weekly, and more often if necessary, sweep interior places clean.
 - a. "Clean," for the purpose of this subparagraph, shall be interpreted as meaning free from dust and other material capable of being removed by use of reasonable effort and a hand-held broom.
3. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of succeeding

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material, using equipment and materials required to achieve the necessary cleanliness.

4. Following the installation of finished floor materials, clean the finish floor daily (and more often if necessary) at all times while work is being performed in the space in which finish materials are installed.
 - a. "Clean," for the purpose of this subparagraph, shall be interpreted as meaning free from foreign material which, in the opinion of the Architect, may be injurious to the finish floor material.

3.2 DUST CONTROL

- A. Establish and enforce strict cleaning and dust control procedures before, during and after installation of health care equipment, as approved by Owner and Architect. This requirement is critical to successful completion of the Work.
- B. Clean interior spaces prior to the start of finish painting and continue cleaning on as-needed basis until painting is finished. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly-coated surfaces.

3.3 FINAL CLEANING

- A. "Clean," for the purpose of this Article, and except as may be specifically provided otherwise, shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.
- B. Prior to completion of the Work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described in Article 3.1 above.
- C. Site:
 1. Unless otherwise specifically directed by the Architect, broom clean paved areas on the site and public paved areas adjacent to the site.
 2. Completely remove resultant debris.
- D. Structures:
 1. Exterior:
 - a. Visually inspect exterior surfaces and remove all traces of soil, waste materials, smudges, and other foreign matter.
 - b. Remove all traces of splashed materials from adjacent surfaces.

- c. If necessary to achieve a uniform degree of cleanliness, hose down the exterior of the structure.
 - d. In the event of stubborn stains not removable with water, the Architect may require light sandblasting or other cleaning at no additional cost to the Owner.
 - 2. Interior:
 - a. Visually inspect interior surfaces and remove all traces of soil, waste materials, smudges, and other foreign matter.
 - b. Remove all traces of splashed material from adjacent surfaces.
 - c. Remove paint droppings, spots, stains, and dirt from finished surfaces.
 - 3. Glass: Clean inside and outside.
 - 4. Polished surfaces: To surfaces requiring routine application of buffed polish, apply the polish recommended by the manufacturer of the material being polished.
- E. Ventilating Systems:
- 1. Clean permanent filters and replace disposable filters if units were operated during construction.
 - 2. Clean ducts, blowers and coils if units were operated without filters during construction.
- F. Schedule final cleaning as approved by the Architect to enable the Owner to accept a completely clean Work
- G. Prior to final completion, or Owner occupancy, Contractor shall conduct an inspection of sight exposed surfaces in all construction areas, to verify that the entire Work is clean.

SECTION 02010 - SITE CONDITIONS

PART 1-GENERAL

1.01 RELATED INFORMATION

Related information and requirements are included in the General and Supplementary Conditions with regard to existing underground utilities.

Existing Utilities and Underground Structures Section 02016

1.02 INFORMATION ON SITE CONDITIONS

- A. All information obtained by the engineer regarding site conditions, subsurface information, groundwater elevations, existing constructions of site facilities, and existing underground utilities and similar data are shown on the plans or provided herein.
- B. Information derived from inspection of topographic maps, or from plans showing locations of utilities and structures will not in any way relieve Contractor from any risk, or from properly examining the site and making such additional investigations as he may elect, or from properly fulfilling all the terms of the contract documents.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. The Contractor shall satisfy himself as to the nature and location of the work and the general and local conditions.
- B. The contractor further shall satisfy himself as to the character, quality, and quantity of surface and subsurface materials to be encountered by performing site inspections, reviewing soils report (if applicable) and reviewing any other pertinent information. Any new exploratory work must be approved by the owner. Failure of the contractor to acquaint himself with the site and all available information will not relieve him of the responsibility for properly estimating the difficulty or cost of completing the work.
- C. The Contractor shall anticipate underground obstructions such as utility lines, concrete, water table and variation hereof due to rainfall, soil conditions and debris. No extra payment will be allowed for the removal, replacement, repair or possible increased cost caused by underground obstructions. Any such lines or obstructions indicated on the map show only the approximate location and must be verified in the field by the Contractor. The Owner and Engineer will endeavor to familiarize the contractor with all known underground obstructions, but this will not relieve the

Contractor from full responsibility in anticipating and locating all underground obstructions.

D. ADDITIONAL INFORMATION

Prior to bidding, bidders may make their own subsurface investigations subject to time schedules and arrangements approved in advance by the Owner. Before any subsurface test holes are excavated, obtain permits from governing agency to perform such work.

SECTION 02015 - SUBSURFACE INVESTIGATION

PART 1 - GENERAL

1.1 DESCRIPTION

A. Soils Investigation Report

1. A Soils Investigation Report has been prepared for the site of this Work by the Soils Engineer named on the Project Directory in the Project Manual.
2. The Soils Investigation Report is enclosed with this Section.

B. Use of data:

1. This report is herein incorporated by reference as a part of the Contract Documents.
2. The report is available for bidders' information, but is not a warranty of subsurface conditions.
3. Bidders should visit the site and acquaint themselves with existing conditions.
4. Prior to bidding, bidders may make their own investigations to satisfy themselves as to site and subsurface conditions, but such investigations may be performed only under the time schedules and arrangements approved in advance by the Architect.

1.2 QUALITY ASSURANCE

- A. A Soils Engineer shall be retained by the Owner to verify the adequacy of work in connections with excavating, trenching, filling, backfilling, and grading, and to perform compaction testing.
- B. Readjust work performed that does not meet approval of the Soils Engineer.
- C. Initial testing and inspection by the Soils Engineer should be paid for by the Owner. Additional testing of readjusted work required due to failure of the Work to meet the approval of the Soils Engineer at the initial inspection, shall be paid for by the Contractor.

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION (not applicable)

CARL RITTIMAN & ASSOCIATES, INC.
Certified Professional Soil Scientist
PO Box 590 • Mendocino CA 95460

Doug Anderson
Assistant Facilities Manager
Mendocino County Executive Office
Facilities & Fleet Division
851 Low Gap Road
Ukiah, CA 95482
andersond@mendocinocounty.org

Date: July, 7th, 2020

re: 8207 East Road; on-site sewage disposal system evaluation

Doug,

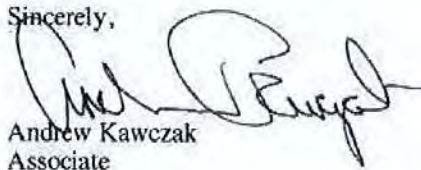
As was requested, personnel from our office were at the above referenced site on June 16th. The purpose of our site visit was to:

- locate and evaluate the existing disposal system
- evaluate the soils within the existing leachfield area
- evaluate the soils in a potential replacement leachfield area
- provide a discussion of leachfield capacity and how that relates to the anticipated new use of the facilities

The pages following, summarize our findings and recommendations. If after review, any questions arise, please feel free to contact our office.

Thank you.

Sincerely,



Andrew Kawczak
Associate

Existing Disposal System

A scaled site map of the existing disposal system is attached. The system was installed in 1971 and consists of 3 leaching trenches (a copy of the permit is attached). The septic tank is a concrete tank. The tank is buried 16 inches below grade and access risers have been installed over each tank port (in 2004). An effluent filter was installed on the outlet end of the tank (in 2004). The filter was noted to have some broken tubes on the filter cartridge. The inlet concrete baffle was found to be in good shape.

The septic tank was found to be in good condition.

Inspection monitoring wells were found on the ends of lines one and two. This installation (of monitoring wells)was also conducted in 2004. It appears as if at the time which improvements to the system were being conducted in 2004, only 2 trenches were located and as such, only the 2 monitoring wells were installed. These improvements were conducted as part of the conditions placed on the system by the Mendocino County Division of Environmental Health (DEH) in order to allow for the construction of the residence on-site.

Our evaluation found that there does exist a third trench, which currently runs under the shed and sidewalk near the residence.

We uncovered the first distribution box. This is a small buried concrete vessel that receives the effluent from the septic tank and diverts it to the leaching trenches. It was noted that a portion of the piping from the tank to the box was PVC which is connected to the original orangeburg piping. Orangeburg pipe is constructed of tar and paper and is found to often severely degrade over time.

A flow test of the system was conducted; Approximately 150 gallons of water was added to each outlet pipe exiting the box and all water was readily accepted.

Line one was probed and found to be obstruction free its entire length.

The bottom of each leaching trench is approximately 30-32 inches below grade.

Excavations were conducted onto the top of each trench to assess the condition of the gravel within the leachlines. If a leachfield is in poor condition, the system becomes anaerobic which would be evidenced by the condition of the gravel. We found the gravel within all trenches to be clean, indicating a properly functioning leachfield.

The leachfield was found to be in acceptable condition.

There are several recommendations we have to improve the conditions and longevity of the existing system:

- replace the broken effluent filter cartridge (FTS0444-36 filter cartridge only; no housing)
- replacing the pipe between the septic tank and distribution box with new ABS or PVC Sch40, 4" pipe
- replacement of the existing distribution box with a new concrete distribution box set for equal distribution
- installation of new distribution box at the start of line 2
- installation of access risers and lids over the two distribution boxes; Orenco risers and lids installed as per attached detail
- replacement of the pipe between the box 1 and 2 as well as between box 2 and line 3, with new ABS or PVC Sch40 pipe; 3" pipe
- replacing first 5 feet of orangeburg pipe in each leaching trench with new perforated pipe; additional pipe shall be sleeved into the orangeburg (ideally 10-15 feet) and the replaced pipe shall be covered with drain rock and a silt barrier.

Soil Conditions

Soil Profile P1 (in existing leachfield area)

- 0-21" Very dark brown (7.5YR 2.5/3) sandy clay loam, strong subangular blocky structure, friable to firm, common fine and medium roots, few coarse roots, 10-15% hard rounded gravel 2-50mm
- 21-96" Dark brown (7.5YR 3/3) very gravelly sandy clay loam, moderate subangular blocky structure, friable, common fine and medium roots, 40-50% hard rounded gravel 2-75mm and 5-10% hard rounded cobbles 75-150 mm

Soil Profile P2 (potential replacement area on North side of property)

- 0-18" Dark brown (7.5YR 3/3) sandy loam, strong subangular blocky structure, friable, common fine and few medium roots, 10-15% hard rounded gravel 2-50mm
- 18-84" Dark brown (10YR 3/3) gravelly sandy clay loam, strong subangular blocky structure, firm, few fine and medium roots, 20-300% hard rounded gravel 2-75mm
- 84-96" Dark brown (7.5YR 3/3) very gravelly sandy clay loam, moderate subangular blocky structure, friable, common fine and medium roots, 30-50% hard rounded gravel 2-75mm and 5% hard rounded cobbles 75-150 mm

The soil conditions observed both within the existing leachfield area and in the potential replacement area show that well drained permeable soil conditions are present. No evidence of a winter watertable was noted within the 8 feet of observed soils. The permeability of the soil is acceptable throughout the profile.

Leachfield Capacity

The capacity of a leachfield on a gallons per day basis can be calculated by measuring the soil acceptance rate (in terms of gallons of effluent per day per square foot of soil) and multiplying this value by the number of square feet of infiltrative surface that the leachfield design provides. In this County two methods can be used to measure the soils acceptance rate; a laboratory method that relates soil permeability to soil texture or by conducting an actual in field percolation test. For this analysis we will use the laboratory method to assign a soil acceptance rate. Soil samples taken from the leachfield area were found to fall within Soil Texture Suitability Chart Zone 2B. Soils that fall within Soil Textural Suitability Zone 2B are assigned a soil application rate of 0.7 gal/sq.ft./day. This means that the effluent can be applied to the soil at this rate. The existing leachlines are 2 feet wide, with one foot of gravel beneath the leachpipe. This configuration provides 4.0 square feet of soil surface area for every lineal foot of trench. The leachfield consists of 171 lineal feet of leaching trench. The existing leachfield capacity can be calculated :

$171 \text{ feet lineal feet} \times 4.0 \text{ square feet/lineal foot} = 684 \text{ square feet of infiltrative surface}$

$684 \text{ square feet of infiltrative surface} \times 0.7 \text{ gal/sq.ft./day} = 478 \text{ gallons per day capacity}$

Projected Daily Wastewater Flow

The proposed plans for the site are to be used as a training center as well as a Sheriff substation. The estimated water use for each activity can be calculated. As a training center, it is anticipated that a maximum of 73 persons could use the facility per day. Although it is anticipated that only two training events would occur each week, we will calculate the wastewater flow assuming daily use. The wastewater generated from the training facility will be from toilet uses. Each toilet use will be assigned a daily wastewater flow of 2.0 gallons per use. This provides for 1.5 gallons per use for toilet waste and 0.5 gallons per use for hand washing. We assume that each training attendee will use the restroom 2 times per the day. The anticipated daily wastewater flow from the training center can be calculated:

$73 \text{ persons} \times 2 \text{ restroom visits/day} \times 2.0 \text{ gal/visit} = 292 \text{ gallons per day}$

The substation, when staffed, may have a maximum of 7 personnel on-site. The wastewater flow from this use will include toilet waste as well as some kitchen use. We estimate that the daily flow from this use would not exceed 10-15 gallons per person per day. The anticipated daily wastewater flow from the substation can be calculated:

$7 \text{ persons} \times 15 \text{ gallons per day} = 105 \text{ gallons per day}$

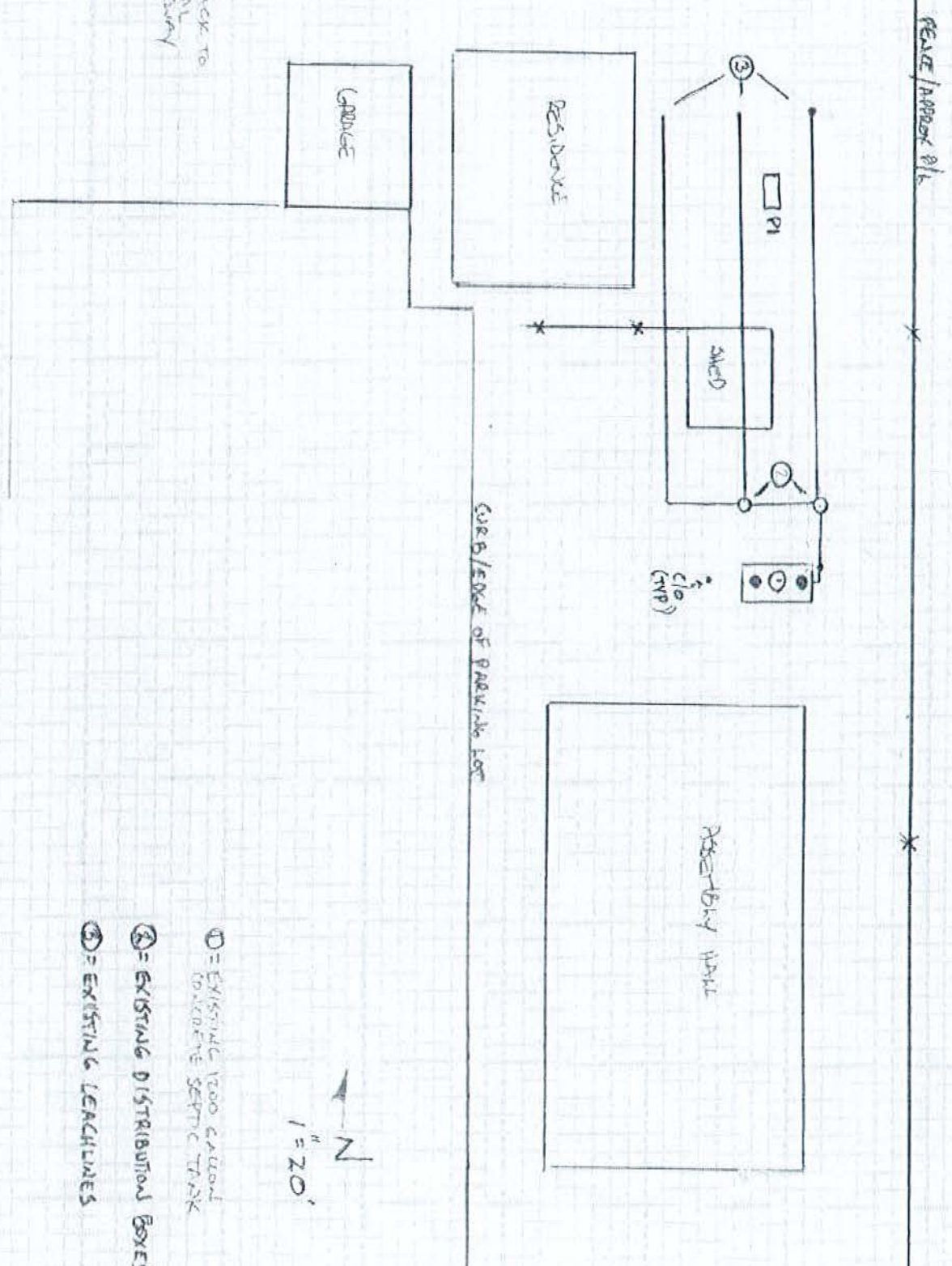
The total anticipated wastewater flow from the facility then would be:

$292 \text{ gpd} + 105 \text{ gpd} = 397 \text{ gallons per day}$

The calculated capacity of the leachfield was shown to be 478 gallons per day, therefore the existing leachfield can accommodate the planned use at the site given the assumptions of the described uses for each structure.

Two factors should be kept in mind when evaluating these findings. The first is that the calculations are based on the assumptions provided (number of attendees, toilet uses per attendee) to arrive at the estimated daily wastewater flow. This number could be refined by adding a water meter to the water service line and monitoring the water use of the facility once it is under use. Adjustments to the wastewater disposal system could be made based on the actual wastewater flows if necessary.

The second factor to be aware of is that this analysis is based on using the laboratory method of assigning the soil acceptance rate of 0.7 gallons per square foot per day. The other option of determining the soil acceptance rate is to conduct an actual in field percolation test of the soil. This test basically involves excavating into the soil, to the leaching trench depth, adding water to the excavation and measuring the rate at which the soil absorbs the water. We usually find that the in field method of measuring soil permeability results in an allowable soil application rate 2 to 3 times the rate obtained with the laboratory method. This may be significant should the use of the facility expand beyond the current planned uses. If the use of the facility increases the wastewater flow may increase and the leachfield capacity, as determined using the laboratory method of assigning soil permeability, might be then found to be inadequate. Should that be the case it might be possible to conduct the percolation testing to show that the existing leachfield actually has a greater capacity than the laboratory method of assigning soil permeability has shown.



SO SET BACK TO
EXISTING
VEHICLEWAY

SUB/EDGE OF PARKING LOT

Residential Wall

N
1" = 20'

- ① = EXISTING 1200 GALLON CONCRETE SEPTIC TANK
- ② = EXISTING DISTRIBUTION BOXES
- ③ = EXISTING LEACHLINES

Permit No. 163-140-08
Permit No. 3608
5382

☒ New Installation

☐ Replacement or Repair

County of Mendocino, Department of Public Health
Permit For Individual Sewage Disposal System

P. O. Box 205 — 880 North Bush Street, Ukiah, California

Telephone: 462-8811

BRANCH OFFICE

303 N. MAIN

904-3158

FORT BRAGG, CALIF.

BRANCH OFFICE

WILLITS CITY HALL

459-5549

WILLITS, CALIF.

Redwood Valley Congregation

Date Aug. 12, 1921

Name DE JEHOUAH'S WITNESSES For CHURCH No of Bedrooms 1-2-3-4

Address: P.O. Box 327 Leach line required 170 Ft. No. of lines proposed 3

Location Redwood Valley Tank Size 10' L, 4' W, 5' D

RD AT Corner Lot Size Acres 43,461 Sq. ft.

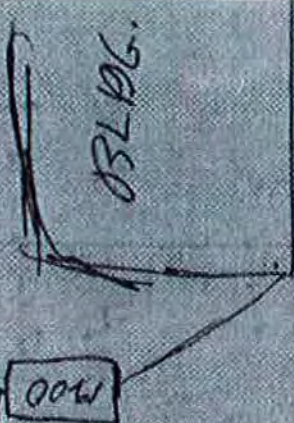
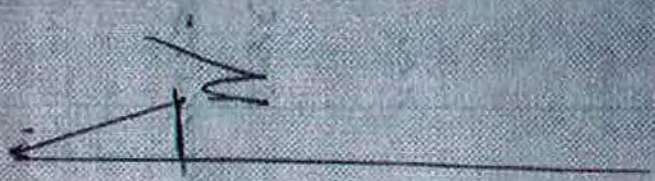
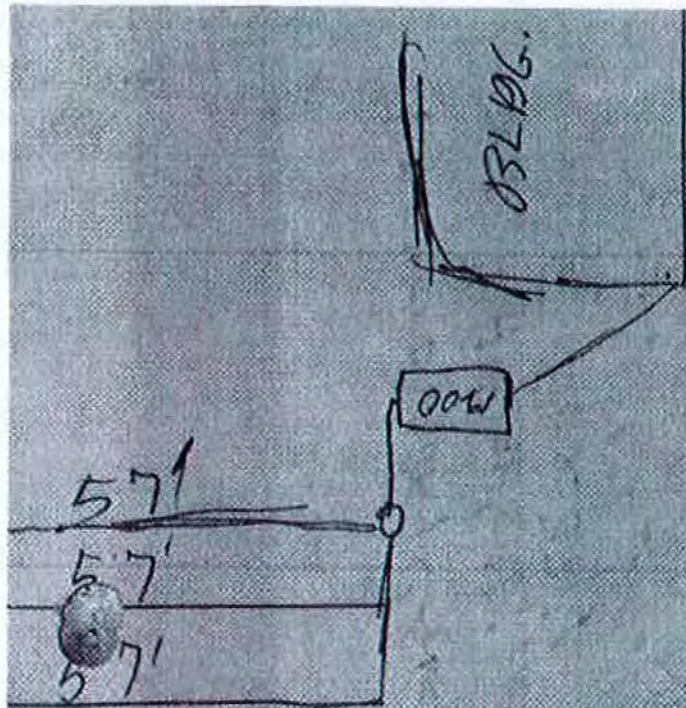
REQUIREMENTS:

- A--A concrete two-compartment septic tank of at least 810 gallons working capacity. (1200 gal. tank required with garbage disposal).
B--For one and two bedroom dwellings a tile and gravel disposal trench 30 inches deep, 2 feet wide and 120 feet in length shall be installed to receive the liquid overflow from the septic tank. Dwellings consisting of three bedrooms shall install 170 linear feet of leach line. Trench, beginning at the distribution box shall have a gradual fall of approximately 1 INCH TO 30 FEET.
C--No part of this sewage disposal system shall be placed closer than 10 feet from the adjoining property line or any foundation.
D--The septic tank and drain field must be at least 50 feet from any well and should be located 100 feet from any well, located down hill from the well if possible.
E--When these sewage disposal systems have been installed, and before the top will has been placed over the septic tank and trench, the builder or owner SHALL NOTIFY the Health Department IN WRITING that a final inspection can be made. This is not a guarantee of proper or prolonged satisfactory operation of this system. This permit expires one year from date of issuance.

PERMIT ISSUED

Date System Approved and Inspected 10/4 1921

By: Daniel C. Long R. S. By Roy B. Bingham R. S.
SANTARIAN



Division of Environmental Health

501 Low Gap Road, Rm 1326
Ukiah, CA 95482
(707) 463-4466
Fax (707) 463-4038



790 A-1 S Franklin St
Fort Bragg, CA 95437
(707) 961-2714
Fax (707) 961-2720

On-Site Sewage System Permit

Date Printed April 17, 2002

Permit Number ST22946

JEHOVAH'S WITNESSES

P.O. BOX 347

REDWOOD VALLEY CA 95470

System Site Address and Assessor's Parcel Number

8207 East Rd.

Redwood Valley

APN 163-140-14

Design Flow (gal/d) 0
Absorption Media Gravel
Total Depth (in) 0
Absorption Media Depth (in) 0
Absorption Trench Width (in) 0
Calculated Total Linear Feet None

Permit Type Replacement
Strength Residential
Septic Tank Volume (gal) 1200
Tank Material Concrete
Calculated Surface Area (sq ft) None

Special Conditions

Install effluent filter in septic tank and inspection risers at the end of the leach lines only. See diagrams.
No additional leach line. Replacement area also designated.

to leach lines & 5' to septic tank.

Standard Conditions

1. This permit expires 2 years from the date of issuance as per Mendocino County Code Section 16.08.020, unless renewed prior to the expiration date.
2. The septic system shall be constructed according to this permit and the attached plans and specifications as per DEH which DEH received on April 1, 2002.

Prior written approval shall be obtained from DEH for any deviation from the permit or plans.

3. Systems shall be installed no earlier than May 1 and no later than November 1. Persons installing a system at any other time shall obtain written permission from DEH or the designer.

Mendocino County Planning Department Approval

The Site Evaluation Report was approved by
KL on April 1, 2002.

By _____ Date _____ Coastal Zone: Y / N

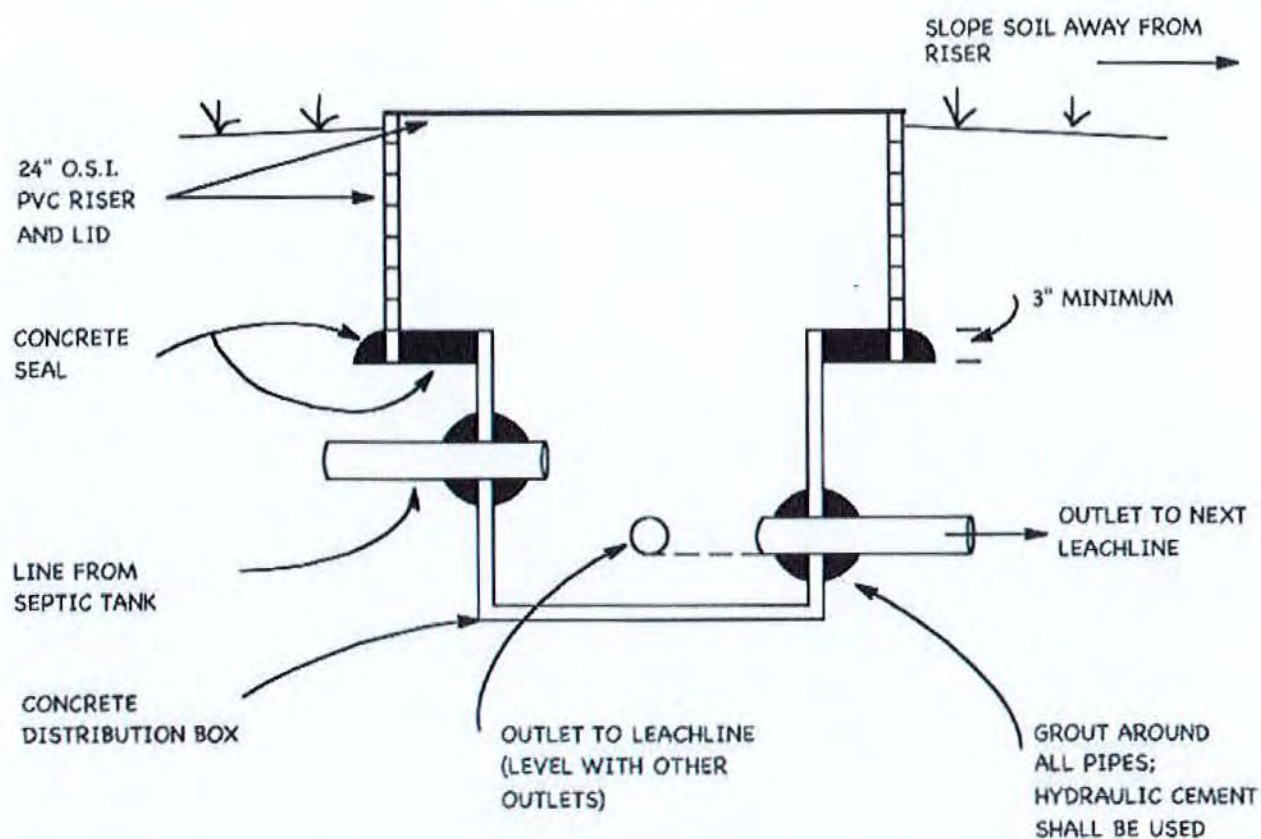
KL 4/17/02

Permit Issued

Karen Longmire *4/17/02*
Health Inspector ME Issue Date

Permit Finaled

Jeff. Osler *4/8/04*
Health Inspector Finaled Date



DISTRIBUTION BOX AND RISER DETAIL FOR EQUAL DISTRIBUTION

NTS

SECTION 02016 - EXISTING UTILITIES AND UNDERGROUND STRUCTURES

PART 1-GENERAL

1.01 DESCRIPTION

Related requirements specified elsewhere: See Division 1 regarding general conditions specific to the contract.

See also Plans for location of utilities and underground structures as are they believed to exist.

1.02 CALIFORNIA ADMINISTRATIVE CODE

- A. Section 1540(a)1 of Construction Safety Orders (Title 8) California Administrative Code, Section 1540 states:

(1) "Prior to opening and excavation, effort shall be made to determine whether underground installations; i.e., sewer, water, fuel, electric lines, etc. will be encountered and, if so, where such underground installations are located. When the excavations approaches the approximate locations of such an installation, the exact location shall be determined by careful probing or hand digging; and, when it is uncovered, adequate protection shall be provided for the existing installation. All known owners of underground facilities in the area concerned shall be advised of proposed work at least 48 hours prior to the start of actual excavation."

- B. The engineer has determined their locations as well as existing mapping permits. However, in line with California's Administrative Code, Section 1540, Contractor shall make the effort to determine the exact location of underground installations.

PART 2-PRODUCTS-OWNERS

2.01 UTILITIES AFFECTED

- A. Electrical: Pacific Gas and Electric Company, Fort Bragg, California, 95437. In this area, P.G. & E. has control of overhead and underground power only. It should be noted that where overhead service to a structure known requiring it, does not exist, then underground power service shall be assumed to exist. For underground utility location call (800) 642-2444.

- B. Gas: Contact State Parks for confirmation of locations.
- C. Water Service: Owner
- D. Drainage & Roads: The county of Mendocino, D.O.T. 707-463-4363
- E. Telephone: Pacific Telephone has offices in Ukiah, (707) 468-2645 for assistance with location of underground telephone facilities.

2.02 PRIVATE UTILITIES AFFECTED

No attempt has been made to locate private utilities on private property such as sprinkler irrigation systems, electrical conduits, sanitary sewage septic tanks and leach field disposal systems, gas pipes, etc. It is the responsibility of the Contractor to contact the various individual property owners prior to construction in such areas.

PART 3- EXECUTION

3.01 LOCATION OF UTILITIES

- A. Pacific Gas and Electric Company has been cooperative in the past about remarking their facilities and making available personnel to assist in location of gas and electrical facilities. Underground electrical lines may exist in the project area: locate prior to digging.

3.02 CONTRACTOR RESPONSIBILITY

The contractor shall anticipate water, gas, electrical, telephone, and cable TV services to each residence, as well as water, telephone, electrical, cable TV, and gas mains in the streets to serve various residences. It may be expected that there will be variation in location from that as shown on the Plans to the actual location. Actual location can best be determined in the field after remarking by the various utilities affected.

No extra payment will be allowed for the removal, replacement, repair, or possible increased cost caused by inadvertent or planned interception and breaking of underground obstructions which may exist.

It should be understood that the various utilities are indicated on the Plans to show only the approximate location and must be verified in the field by the Contractor. The various utilities will cooperate with the Contractor to endeavor to familiarize him with all unknown underground utilities obstructions, but this will not relieve the Contractor from full responsibility in anticipating and locating their actual location and depth.

SECTION 02070 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Carefully demolish and remove from the site those items scheduled to be so demolished and removed.

1.2 APPLICABLE CODES AND REGULATIONS:

- A. General Requirements: See Specification Section 01010 - Summary of Work.
- B. Recycling Requirements: This project is subject to the Mendocino County "Construction and Demolition Recycling and Reuse" Ordinance and the Department of Toxic Substances Control "Requirements for Generators of Treated Wood Waste."
- C. Air Quality Requirements: All materials and workmanship shall comply with all current requirements of the Mendocino County Air Quality Control District. Provide all application materials, fees and documentation necessary to obtain all permits required by the Mendocino County Air Quality Control District. Obtain approval for all operations and present to the Owner, at the close of construction, signed copies of all required permits indicating successful completion of all permit requirements.

1.3 QUALITY ASSURANCE:

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.

PART 2 - PRODUCTS

(No products are required in this Section.)

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

MEASURE B – REGIONAL TRAINING CENTER
SELECTIVE DEMOLITION
02070-1

3.2 DEMOLITION

- A. By careful study of the Contract Documents, determine the location and extent of selective demolition to be performed.
- B. In company with the Architect, visit the site and verify the extent and location of selective demolition required.
 - 1. Carefully identify limits of selective demolition.
 - 2. Mark interface surfaces as required to enable workmen to identify items to be removed and items to be left in place intact.
- C. Prepare and follow an organized plan for demolition and removal of items.
 - 1. Shut off, cap, and otherwise protect existing public utility lines in accordance with the requirements of the public agency or utility having jurisdiction.
 - 2. Completely remove items scheduled to be so demolished and removed, leaving surfaces clean, solid, and ready to receive new materials specified elsewhere.
 - 3. In all activities, comply with pertinent regulations of governmental agencies having jurisdiction.
- D. Disposal of Materials

Contractor shall stockpile all wood material generated by demolition activities which has been denailed and cleaned of other substances such as roofing, caulking, building paper, etc. Burnable materials may be burned at a location approved by the Owner provided that the Contractor obtains all required permits for burning. Remaining material unsuitable for burning shall be disposed of off site by the contractor.

E. Salvage of Existing Materials

Remove existing materials identified in the Contract Documents which are suitable for reuse. Stack all salvaged materials in a safe place with wood boards separating units and wood protection all around. Salvaged materials shall be protected from damage by the contractor until the completion of the demolition contract.

- F. Use means necessary to prevent dust becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.

3.3 REPLACEMENTS

- A. In the event of demolition of items not so scheduled to be demolished, promptly replace such items to the approval of the Architect and at no additional cost to the Owner.

SECTION 02080 - CONSTRUCTION WASTE MANAGEMENT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work included: Construction waste shall be managed in conformance with the applicable codes and regulations listed below.

1.2 APPLICABLE CODES AND REGULATIONS:

- A. General Requirements: See Specification Section 01010 - Summary of Work.
- B. Recycling Requirements: This project is subject to the Mendocino County "Construction and Demolition Recycling and Reuse" Ordinance and the Department of Toxic Substances Control "Requirements for Generators of Treated Wood Waste."
- C. This project is subject to the requirements of the most recent edition of the California Green Building Standards Code (CALGreen) with current State and Local amendments.

1.3 QUALITY ASSURANCE:

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.

PART 2 - PRODUCTS

(No products are required in this Section.)

PART 3 - EXECUTION

3.1 SITE AND SURFACE CONDITIONS

- A. Examine areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 CONSTRUCTION WASTE MANAGEMENT

- A. By careful study of the Contract Documents, determine the location and extent of construction waste management to be performed.
- B. In company with the Architect, visit the site and verify the extent and location of construction waste management required.
 - 1. Carefully identify limits of selective demolition.
 - 2. Mark interface surfaces as required to enable workmen to identify items to be managed according to the requirements of this section.
- C. Prepare and follow an organized plan for construction waste management.
 - 1. Establish a location on site for construction waste management tasks. Sort waste into required categories and stockpile materials until ready for disposal.
 - 2. Develop an organized plan for construction waste management and fully inform all employees of the requirements and conditions.
 - 3. Use means necessary to prevent dust, airborne debris and waterborne debris from becoming a nuisance to the public, to neighbors, workers and to other work being performed on or near the site.
- D. Disposal of Materials
 - 1. Completely remove items scheduled to be removed from site, leaving surfaces clean, solid, and ready to receive new materials specified elsewhere.
 - 2. In all activities, comply with pertinent regulations of governmental agencies having jurisdiction.

3.3 SUBMITTALS:

- A. Submit construction waste management plan, disposal confirmation and any other required documentation to governmental agencies having jurisdiction, Architect and Owner.

SECTION 02221 - TRENCHING, BACKFILLING, AND COMPACTING

PART 1 - GENERAL

- 1.1 Work included: Trench, backfill, and compact as specified herein and as needed for installation of underground utilities associated with the Work.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. Comply with State of California Department of Transportation Standard Specifications most recent edition for earthwork, grading and paving.
 - C. Use equipment adequate in size, capacity, and numbers to accomplish the work in a timely manner.
- 1.3 SUBMITTALS:
 - A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.

PART 2 - PRODUCTS

- 2.1 SOIL MATERIALS
 - A. Fill and backfill materials:
 - 1. Provide soil materials free from organic matter and deleterious substances, containing no rocks or lumps over 6" in greatest dimension, and with not more than 15 percent of the rocks or lumps larger than 2-3/8" in their greatest dimension.
 - 2. Fill material is subject to the approval of the soil engineer, and is that material removed from excavations or imported from off-site borrow areas, predominantly granular, non-expansive soil free from roots and other deleterious matter
 - 3. Do not permit rocks having a dimension greater than 1" in the upper 12" of fill or embankment.
 - 4. Cohesionless material used for backfill: Provide sand free from, organic material and other foreign matter, and as -approved by the soil engineer.

2.2 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS:

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 PROCEDURES:

A. Utilities:

1. Unless shown to be removed, protect active utility lines shown on the drawings or otherwise made known to the Contractor prior to trenching. If damaged, repair or replace at no additional cost to the owner.
2. If active utility lines are encountered, and are not shown on the Drawings or otherwise made known to the Contractor, promptly take necessary steps to assure that service is not interrupted.
3. If service is interrupted as a result of work under this Section, immediately restore service by repairing the damaged utility at no additional cost to the Owner.
4. If existing utilities are found to interfere with the permanent facilities being constructed under this Section, immediately notify the Architect and secure his instructions.
5. Do not proceed with permanent relocation of utilities until written instructions are received from the Architect.

B. Protection of persons and property:

1. Barricade open holes and depressions occurring as part of the Work, and post warning lights on property adjacent to or with public access.
2. Operate warning lights during hours from dusk to dawn each day and as otherwise required.
3. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, washout, and other hazards created by operations under this Section.

C. Dewatering:

1. Remove all water, including rain water, encountered during trench and sub-structure work to an approved location by pumps, drains, and other approved methods.
2. Keep trenches and site construction area free from water.

MEASURE B – REGIONAL TRAINING CENTER
TRENCHING, BACKFILLING, AND COMPACTING

- D. Use means necessary to prevent dust becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.
- E. Maintain access to adjacent areas at all times

3.3 TRENCHING

- A. Comply with pertinent provisions of Section 02220, and the provisions of this Section.
- B. Provide sheeting and shoring necessary for protection of the Work and for the safety of personnel.
 - 1. Prior to backfilling, remove all sheeting.
 - 2. Do not permit sheeting to remain in the trenches except when, in the opinion of the Architect, field conditions or the type of sheeting or methods of construction such as use of concrete bedding are such as to make removal of sheeting impracticable. In such cases, the Architect may permit portions of sheeting to be cut off and remain in the trench.
- C. Open cut:
 - 1. Excavate for utilities by open cut.
 - 2. If conditions at the site prevent such open cut, and if approved by the Architect, trenching may be used.
 - 3. Short sections of a trench may be tunneled if, in the opinion of the Architect, the conductor can be installed safely and backfill can be compacted properly into such tunnel.
 - 4. Where it becomes necessary to excavate beyond the limits of normal excavation lines in order to remove boulders or other interfering objects, backfill the voids remaining after removal of the objects as directed by the soil engineer.
 - 5. When the void is below the subgrade for the utility bedding, use suitable earth materials and compact to the relative density directed by the soil engineer, but in no case to a relative density less than 90%.
 - 6. When the void is in the side of the utility trench or open cut, use suitable earth or sand compacted or consolidated as approved by the soil engineer, but in no case to a relative density less than 80%.
 - 7. Remove boulders and other interfering objects, and backfill voids left by such removals, at no additional cost to the Owner.
 - 8. Excavating for appurtenances:
 - a. Excavate for manholes and similar structures to a distance sufficient to leave at least 12" clear between outer surfaces and the embankment or shoring that may be used to hold and protect the banks.

- b. Overdepth excavation beyond such appurtenances that has not been directed will be considered unauthorized. Fill with sand, gravel, or lean concrete as directed by the soil engineer, and at no additional cost to the Owner.
- D. Trench to the minimum width necessary for proper installation of the utility, with sides as nearly vertical as possible. Accurately grade the bottom to provide uniform bearing for the utility.
- E. Depressions:
 - 1. Dig bell holes and depressions for joints after the trench has been graded. Provide uniform bearing for the pipe on prepared bottom of the trench.
 - 2. Except where rock is encountered, do not excavate below the depth indicated or specified.
 - 3. Where rock is encountered, excavate rock to a minimum overdepth of 4" below the trench depth indicated or specified.
- F. Where utility runs traverse public property or are subject to governmental or utility company jurisdiction, provide depth, bedding, cover, and other requirements as set forth by legally constituted authority having jurisdiction, but in no case less than the depth shown in the Contract Documents.
- G. Where trenching occurs in existing lawns, remove turf in sections and keep damp. Replace turf upon completion of the backfilling.
- H. Cover:
 - 1. Provide trench depth required by governmental agencies having jurisdiction over the Work and in accordance with Cal Trans Standard Specifications. Provide the following minimum cover over the top of the installed item below the finish grade or subgrade where standards are less restrictive:
 - a. Areas subject to vehicular traffic:
 - (1) Sanitary sewers: 48"
 - (2) Storm drains: 36"
 - b. Areas not subject to vehicular traffic:
 - (1) Sanitary sewers: 30";
 - (2) Storm drains: 18".
 - c. All areas:
 - (1) Water lines: 30";
 - (2) Natural gas lines: 24";
 - (3) Electrical cables: 42";
 - (4) Electrical ducts: 36".
 - d. Concrete encased:
 - (1) Pipe sleeves for water and gas lines: 24"
 - (2) Sanitary sewers and storm drains: 12";
 - (3) Electrical ducts: 24".

2. Where utilities are under a concrete structure slab or pavement, the minimum depth need only be sufficient to completely encase the conduit or pipe sleeve, and electrical long-radius rigid metal conduit riser, provided it will not interfere with the structural integrity of the slab or pavement.
 3. Where the minimum cover is not provided, encase the pipes in concrete as indicated. Provide concrete with a minimum 28 day compressive strength of 2500 psi
- 3.4 BEDDING : Provide bedding required by governmental agencies having jurisdiction over the Work and in accordance with Cal Trans Standard Specifications, or as indicated in the Drawings.

3.5 BACKFILLING

A. General:

1. Do not completely backfill trenches until required pressure and leakage tests have been performed, and until the utilities systems as installed conform to the requirements specified in the pertinent Sections of these Specifications.
2. Except as otherwise specified or directed for special conditions, backfill trenches to the ground surface with selected material approved by the soil engineer.
3. Reopen trenches which have been improperly backfilled, to a depth as required for proper compaction. Refill and compact as specified, or otherwise correct to the approval of the soil engineer.
4. Do not allow or cause any of the Work performed or installed to be covered up or enclosed by work of this Section prior to required inspections, tests, and approvals.
5. Should any of the Work be so enclosed or covered up before it has been approved, uncover all such Work and, after approvals have been made, refill and compact as specified, all at no additional cost to the Owner.

B. Lower portion of trench:

1. Deposit approved backfill and bedding material in layers of 6" maximum thickness, and compact with suitable tampers to the density of the adjacent soil, or grade as specified herein, until there is a cover of not less than 24" over sewers and 12" over other utility lines.
2. Take special care in backfilling and bedding operations to not damage pipe and pipe coatings.

C. Remainder of trench:

1. Except for special materials for pavements, backfill the remainder of the trench with material free from stones larger than 6" or 1/2 the layered thickness, whichever is smaller, in any dimension.
2. Deposit backfill material in layers not exceeding the thickness specified, and compact each layer to the minimum density directed by the soil engineer.

D. Adjacent to buildings: Mechanically compact backfill within ten feet of buildings.

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- 3.6 TEST FOR DISPLACEMENT OF SEWERS AND STORMDRAINS:
- A. Check sewers and stormdrains to determine whether displacement has occurred after the trench has been backfilled to above the pipe and has been compacted as specified.
 - B. Flash a light between manholes or, if the manholes have not yet been constructed, between the locations of the manholes, by means of a flashlight or by reflecting sunlight with a mirror.
 - C. If the illuminated interior of the pipe line shows poor alignment, displaced pipes, or any other defects, correct the defects to the specified conditions and at no additional cost to the Owner.
- 3.7 PIPE JACKING : The Contractor may, at his option, install steel pipe casings, tongue-and-groove reinforced concrete pipes, and steel pipes under existing roads or pavements by jacking into place using procedures approved by the governmental agencies having jurisdiction and approved by the soil engineer.
- 3.8 TUNNELING OPERATIONS: The Contractor may, at his option, tunnel pipes into position using procedures approved by the soil engineer and the governmental agencies having jurisdiction.
- 3.9 FIELD QUALITY CONTROL: The soil engineer or Architect will inspect and approve open cuts and trenches before installation of utilities, and will make the following tests:
- A. Assure that trenches are not backfilled until all tests have been completed;
 - B. Check backfilling for proper layer thickness and compaction;
 - C. Verify that test results conform to the specified requirements, and that sufficient tests are performed;
 - D. Assure that defective work is removed and properly re placed.

SECTION 02510 – PAVING AND SURFACING OF WALKS AND PARKING AREAS

PART 1- GENERAL

1.1 DESCRIPTION

Furnish all labor material and equipment complete to provide for spreading and compacting asphalt concrete pavement along with construction of finished asphalt concrete walkways.

1.2 QUALITY ASSURANCE

A. Reference is made to the State of California, CALTRANS Standard Specifications, with the exception of the Payment paragraphs. All applicable subsections of Section 19 shall apply to this work.

PART 2-PRODUCTS

2.1 MATERIALS

A. Asphalt pavement; type B asphalt concrete, performance graded P.G. 64-16, steam refined, 3/4" maximum aggregate, medium grading.

B. Paint Binder: Asphalt emulsion, penetration type.

C. Traffic Paint: Fast-dry white conforming to California State Specification 8010-21E-04.

PART 3-EXECUTION

3.1 ASPHALT PAVING AND INSTALLATION

A. Placement shall be in strict accordance with CALTRANS Standard Specifications.

B. Paint Binder: All existing asphalt and concrete edges when constructed to meet the new asphalt services shall be sprayed with paint binder at the rate of 0.10 gallons per square yard..

C. Patch existing asphalt surfaces to achieve desired grades and repair any areas damaged by construction activities. Seams between existing asphalt and new patch material shall be straight, smooth and uniform.

3.2 TEST

Testing of the asphalt pavement and concrete curbs and walks shall be at the discretion of the Engineer and approving agencies and shall be paid for by the Owner. Retesting shall be paid for by the Contractor.

*** END OF SECTION ***

SECTION 02700 - SITE UTILITY SYSTEMS

PART 1 - GENERAL

- 1.1 THIS SECTION includes all new connections to site utility systems and relocation and capping of all existing utility systems to be abandoned.
- 1.3 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. Plumbing Code: California Plumbing Code most recent edition with current State and local amendments.
 - C. Mechanical Code: California Mechanical Code most recent edition with current State and local amendments.
 - D. Electrical Code: California Electrical Code most recent edition with current State and local amendments.
 - E. Fire Code: California Fire Code most recent edition with current State and local amendments.
 - F. Follow utility supplier instructions for hookups. Verify each individual utility supplier's requirements. Comply with all requirements of utility suppliers.
- 1.4 SUBMITTALS:
 - A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.

PART 2 - PRODUCTS

- 2.1 Provide all materials required for maintaining all existing connections and hookups to utilities and septic system. All couplings, connectors, fittings, gaskets, screws, and any other materials and all labor necessary for maintaining or repairing existing hookups shall be included in the bid price. All piping and wiring for hookups shall be buried underground.
- 2.2 Work includes, but is not limited to, the following utility systems:
 - Electrical Service
 - Telephone Service
 - Water Service
 - Septic System

PART 3 - EXECUTION

- 3.1 PROTECTION OF EXISTING UTILITIES: Verify the location of all existing utility services and mark all lines and conduits prior to commencing earthwork, when utilities are encountered during the Work, carefully dig out around existing services and protect from damage during the course of construction. Any existing services which are damaged during the course of construction shall be repaired or replaced by the Contractor with materials of same type and specification at no additional cost to the Owner.
- 3.2 REPAIRS: For all manufactured products, follow manufacturer's instructions and details unless specifically modified by the Drawings and specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. All such items required by the installation instructions shall be provided by the Contractor at no additional cost to the Owner.
- 3.3 Comply with all relevant code requirements.
- 3.4 Comply with all requirements of utility suppliers.
- 3.5 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

SECTION 03300 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

- 1.1 THIS SECTION includes cast-in-place concrete shown on the Drawings, as specified herein, and as needed for complete and proper installation.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. "Specification for Structural Concrete for Buildings," ACI 301-89 is a standard intended to be used essentially in its entirety, by referral in project specifications, to cover all usual requirements for cast-in-place concrete for buildings.
- 1.3 SUBMITTALS:
 - A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.

PART 2 - PRODUCTS

- 2.1 Comply with pertinent provisions of ACI 301-89, except as may be modified by supplemental requirements stated in Part 3 of this Section.

PART 3 - EXECUTION

- 3.1 INSTALLATION: For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. All such items required by the installation instructions shall be provided by the Contractor at no additional cost to the Owner.
- 3.2 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of

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completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

3.3 SURFACE CONDITIONS: Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.4 SUPPLEMENTAL REQUIREMENTS: Where consistent with the design shown on the drawings and in these Specifications, provide the products and activities described in ACI 301-89 except as modified below. **Item numbers cited below are item numbers contained in ACI 301.**

A. 1.3.1 Definitions: Delete the definition of "Contract Documents" and refer to the definition given in the General Conditions of the Contract.

B. 3.2 Strength of Concrete:

- a. For slabs on grade: 2500 psi
- b. For wall footings: 2500 psi
- c. For column footings: 3000 psi
- d. For floors refer to Table 3.14.2(a)

C. 3.14.2 Class of Floors:

- a. Residential portions: Class 1
- b. Parking portions: Class 3

D. 4.1.3 Use of earth cuts as forms: Earth cuts may be used as forms for vertical concrete when specifically so approved by the Architect and governmental agencies having jurisdiction, and when concrete is at least 2" thicker than thickness shown for formed concrete.

E. 4.1.4 Shop Drawings for formwork: Design of formwork is the responsibility of the Contractor.

F. 4.5.5 Minimum strengths of concrete to be reached before weight-supporting formwork and shoring may be removed:

- a. Formwork not supporting concrete (such as sides of beams, walls, columns, or similar parts of the Work) may be removed after cumulatively curing at not less than 50 degrees F for 24 hours after placing concrete, provided concrete is sufficiently hard to not be damaged by form removal operations, and provided that curing and protecting operations are maintained.

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CAST-IN-PLACE CONCRETE

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- G. 5.2 Types of grades of reinforcing steel:
 - a. Comply with ASTM A165:
 - (1) Temperature steel in walls and slabs, ties, and reinforcing in masonry: Use grade 40.
 - (2) All other: Use grade 60
- H. 5.2.5 Welded wire fabric: Comply with ASTM A185
- I. 5.3 Reinforcement supports: Provide plastic-tipped chairs and accessories for work exposed to view, exposed to weather, or where rust would impair applied finish, so that finished surface will not be marred or stained.
- J. 6.2.2 Expansion joints materials: Comply with ASTM D 944 and ASTM D 1751 or ASTM D 1752 as appropriate.
- K. 10.1.2 Finishes for formed surfaces:
 - a. Provide “rough form finish” for concealed concrete.
 - b. Provide “board formed finish” for all other concrete.
- L. 11.7 Types of slab finishes:
 - a. Provide “smooth trowel finish” for all interior surfaces.
 - b. Provide “broom finish” for landings and walkways.

SECTION 05500 - MISCELLANEOUS METALS

PART 1 - GENERAL

- 1.1 THIS SECTION outlines general requirements for all miscellaneous metal work.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. In addition to complying with pertinent codes and regulations of all government agencies having jurisdiction, unless otherwise specifically directed or permitted by the Architect, comply with the recommendations contained in the most recent editions of the following publications:
 - Welding Manual
published by American Welding Society
 - Steel Construction Manual
published by:
American Institute of Steel Construction
1 East Wacker Drive, Suite 3100
Chicago, IL 60601-2001
(312) 670-2400
 - C. Material quality standards, grades, load and stress ratings and connector schedules given in this Section and in the General Notes of the Drawings are MINIMUM values. Refer to Structural Drawings (S series sheets) for grades, load and stress ratings and connector schedules specific to this project. Where quality standards given on the Structural Sheets exceed values indicated in this Section or in the General Notes, values given on the Structural Drawings shall take precedence. Where quality standards given on the Structural Sheets are less than the values given in this Section or in the General Notes, the HIGHEST of the values shall take precedence.
- 1.3 SUBMITTALS:
 - A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.
 - B. Shop Drawings: Submit Shop Drawings of all pipe railings showing all dimensions and methods of attachment.

PART 2 - PRODUCTS

- 2.1 MATERIALS:
 - A. Steel Plates, Shapes, Bars: ASTM A 36.
 - B. Galvanized Steel Sheet: ASTM A 526, G 90, mill phosphatized.

- C. Galvanizing: ASTM A 386 for assembled products; A 123 for iron and steel hardware. All materials designated as "Galvanized" shall be Hot-Dip Galvanized. No Mechanical or electro-galvanization permitted.
- D. Anchor Bolts, washers, nuts, joist hangers, clips, connectors and other framing items in contact with Pressure Treated wood at interior locations shall be Hot-Dip Galvanized in accordance with ASTM G 185, Simpson ZMAX, USP Triple Zinc G-185, type 316 stainless steel optional or equal products of other manufacturers. Galvanized fasteners shall be used with all galvanized framing connectors.

2.2 MISCELLANEOUS METAL ITEMS:

- A. Rough Hardware: Furnish custom fabricated bolts, plates, anchors and other miscellaneous steel and iron hardware required for framing, supporting and anchoring woodwork.
- B. Steel angles and lintels: Fabricate to sizes shown. Galvanize after fabrication.

PART 3 -EXECUTION

- 3.1 PERFORM cutting, drilling, and fitting required for installation; set work accurately in location, alignment and elevation, measured from established lines and levels. Provide anchorage devices and fasteners where necessary for installation to other work.
- 3.2 FABRICATION:
 - A. Use materials of size and thickness shown, or if not shown, of required size and thickness to produce adequate strength and durability in finished product.
 - B. Weld corners and seams continuously; grind exposed welds smooth and flush. For stainless work use filletweld of stainless steel wire
 - C. Provide protective coating against galvanic action wherever dissimilar metals are in contact.
 - D. All other metal not specified: provide galvanized metal exposed to weather or in contact with concrete or masonry work.
 - E. Shop prime all items not galvanized. See Section 09900 for painting specifications.
 - F. Comply with NAAMM Pipe Railing Manual for all pipe rails.
- 3.3 TOUCH-UP SHOP PAINT after installation. Clean field welds, bolted connections and abraded areas, and apply same type paint as used in shop. Use galvanizing repair paint on damaged galvanized surfaces.

SECTION 06100 - CARPENTRY

PART 1 - GENERAL

- 1.1 THIS SECTION includes all lumber products, plywood, rough and finish carpentry, fasteners and related work. Provide all materials and labor required to perform carpentry for the construction as depicted in the drawings, as specified herein and as needed for a complete and proper installation.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. Lumber grading shall comply with the following grading rules:
 - 1. Western Wood Products Association (WWPA).
 - 2. Redwood Inspection Service (RIS).
 - 3. West Coast Lumber Inspection Bureau (WCLIB).
 - C. Plywood shall comply with the requirements of the Plywood Specification and Grade Guide published by the American Plywood Association.
 - E. Material quality standards, grades, load and stress ratings and connector schedules given in this Section and in the General Notes of the Drawings are MINIMUM values. Refer to Structural Drawings (S series sheets) for grades, load and stress ratings and connector schedules specific to this project. Where quality standards given on the Structural Sheets exceed values indicated in this Section or in the General Notes, values given on the Structural Drawings shall take precedence. Where quality standards given on the Structural Sheets are less than the values given in this Section or in the General Notes, the HIGHEST of the values shall take precedence.
- 1.3 SUBMITTALS:
 - A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.
 - B. Submit structural calculations and shop drawings sufficient to fully describe the design, spans, profiles and connections for prefabricated wood trusses and prefabricated web joists.

PART 2 -PRODUCTS

- 2.1 STRUCTURAL FRAMING LUMBER, unless otherwise indicated, shall be S4S and of the species and grade as noted below:
 - A. Light Framing and Studs: Douglas Fir, No. 2 or better.
 - B. Posts: Douglas Fir, No. 1 or better. Free of heart center.
 - C. Mudsills: Foundation grade Redwood or pressure treated Douglas Fir.

2.2 INTERIOR FINISH LUMBER

- A. Baseboard Casings, Ceiling Mouldings and Other Trim: Kiln Dried Paint Grade Pine stock or MDF mouldings as manufactured by T.M. Cobb Co. or equal.

2.5 MISCELLANEOUS CARPENTRY MATERIALS:

- A. Bolts, washers, clips, framing anchors shall be hot dip galvanized.
- B. Nails: Common wire for framing; finish for finish work; galvanized for exterior decks; ring shank for plywood subflooring/underlayment, Ring-shank type stainless steel red heads for siding, exterior trim, and fascia.

PART 3 -EXECUTION

- 3.1 ALL WORK shall be plumb and true, firmly installed in a neat workmanlike manner, complete in all respects.
- 3.2 INSTALL ALL necessary blocking and furring. Horizontal blocking for siding shall be 2'-0" o.c. maximum. Block all unsupported edges of square edge plywood sheathing.
- 3.3 NAILING shall be in accordance with applicable codes and standards as shown on drawings.
 - A. Nail plywood wall sheathing with ring shank nails according to nailing schedule indicated on the plans.
 - B. Nail siding with stainless steel ring shank type nails.
 - C. All finish work shall be done with finish nails. If nailing tends to split, pre-drill nail holes.
- 3.4 NO CUTTING OF joists and beams for mechanical or electrical lines will be permitted without Architects approval.
- 3.5 ALL BOLTS bearing against wood shall have washers under both nut and head.
- 3.6 HANDLE AND STORE all lumber materials, plywood, etc., which are to be exposed in the finished work to prevent soiling or staining which cannot be removed by normal cleaning techniques. Brush or otherwise clean construction marks from exposed work at completion of job.

SECTION 06410 - ARCHITECTURAL CASEWORK

PART 1 - GENERAL

- 1.1 THIS SECTION includes the requirements for furnishing and installing all plastic laminate faced casework and plastic laminate countertops.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. COMPLY with applicable standards of the Architectural Woodwork Institute's "Architectural Woodwork Standards" most recent edition.
- 1.3 SUBMITTALS:
 - A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.
 - B. Shop Drawings: Submit shop drawings in sufficient detail to indicate conformance to the requirements of the Contract Documents. Include materials, dimensioned plans, elevations, and sections, fastening methods, assembly methods, joint details, accessory listings, and schedule of finishes. Provide elevations at 3/8" scale minimum and indicate plan views of all countertops. Include depths of all casework in submittal.
 - C. Samples: Specified plastic laminate colors for verification of initial selections.

PART 2 - MATERIALS AND FABRICATION

- 2.1 GRADE

Provide W.I.C. Economy Grade, Style A, frameless, Type I, multiple unit construction.
- 2.2 ACCEPTABLE MANUFACTURERS
 - A. Shasta Wood Products, Anderson, CA
 - B. Fremont Millwork Co., Klamath Falls, Oregon
 - C. Ashland Glass and Millwork Co., Medford, Oregon
 - D. Firms with 5 years documented experience with General Contractor on projects of similar scope.

2.3 MATERIALS

A. Laminated Plastic Sheets: Comply with requirements of NEMA LD-3 latest edition.

1. Exposed Horizontal or Vertical Surfaces: General purpose type, NEMA TYPE GP 50, 0.050-inch thick, matte finish. If woodgrain pattern is chosen, run and match vertically. Plastic Laminates shall be selected by Architect from colors and patterns from the complete color range, including premium colors, of the following manufacturers: Formica, Nevamar, and Wilsonart. Multiple colors may be selected for different portions of the work. Field verify color selection with Architect and Owner prior to ordering materials.

2. Formed Surfaces: .042-inch thick, color to match horizontal surfaces, matte finish.

3. Semi-exposed Surfaces:

a. Material for semi-exposed surfaces, except for interior faces of hinged doors shall be:

1. High pressure cabinet liner, or
2. Melamine overlay (LPDL, low pressure decorative laminate).

b. The interior faces of hinged doors shall be faced with 0.020' minimum thickness high pressure thermoplastic cabinet liner.

c. The color for all semi-exposed surfaces shall be white.

B. Drawer sides shall be double faced Melamine on 1/2" 45 lb. industrial particle board.

C. Drawer backs to be double faced Melamine 1/2" particleboard.

D. Drawer bottoms to be double faced Melamine on 1/2" particleboard.

2.4 MISCELLANEOUS MATERIALS

A. Concealed portions. Material shall be on any sound, dry solid stock, plywood, particleboard or any combination thereof.

B. Visible edges exposed or semi-exposed, of ends, tops, bottoms, shelves, webs, stretchers, bulkheads, partitions, and visible frame parts shall be covered with plastic laminate.

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ARCHITECTURAL CASEWORK

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- C. Except for drawer bottoms and case backs, drawer sides and backs, and secondary partitioning in cubicle type cases, all panel portions of case to be 45 lb. density industrial grade particleboard, 3/4" minimum thickness.
- D. Shelves shall be hardwood plywood covered with whatever surface is required by this specification when the shelf is SEMI-EXPOSED or EXPOSED. Up to 32" clear span, shelf shall be 3/4" thick; over 32" to 48" shall be 1" thick.
- E. Web Frames, stringers or spreaders, shall be a minimum of 3/4" thick and 2-1/2" in width, and shall be of either solid stock or plywood.
- F. Backs:
 - 1. Shall be 1/2" particleboard with Melamine finish two sides.
 - 2. Exposed backs shall be 3/4" particleboard with high pressure cabinet liner inside and plastic laminate outside.
- G. Cabinet doors shall be 3/4" particleboard bonded on interior with 0.020" minimum thickness high pressure cabinet liner.
- H. Drawer fronts shall be 3/4" particleboard bonded on interior with 0.020" minimum thickness high pressure cabinet liner and plastic laminate outside.
- I. Edge Banding: All four edges of door and drawer fronts shall be banded with plastic laminate. Colors to be selected by Architect.

2.5 HARDWARE

- A. Hinge option: Unless noted otherwise, Salice 120 degree European style, concealed hinge with dull chrome finish.
- B. Pulls for doors and drawers: Sugatsune #SWF-690 9" long stainless steel pulls, typical. Use 6" long pulls at drawer faces narrower than 13" wide.
- C. Drawer slides:
 - 1. For standard size general usage drawers, Accuride 3832 full extension slides, 100 pound capacity, clear zinc finish.
 - 2. For file drawers, Accuride 4034 all ball bearing, full suspension, full extension slides, 150 pound capacity, clear zinc finish.

D. Wall standards and brackets:

1. Knappe and Vogt No. 80 Standard with No. 180 brackets for medium duty.
2. Knappe and Vogt No. 83 Standard with No. 183 brackets for heavier duty.

E. Shelf Supports shall be Hettich Universal #1 w/ seismic restraint.

F. Magnetic catches shall be Amerock 9793, single, or Amerock 9794 double.

2.6 ASSEMBLY

A. Shall be as follows:

1. Joinery

- a. All cabinet members shall be securely fastened together.
- b. All exposed and semi-exposed joints shall be tight and true.
- c. All joints shall be securely glued.

2. Web Frames. A continuous stretcher front and rear shall be furnished and shall be attached by means of a dado. A continuous stretcher at the front shall be furnished at the approximate mid-height of all drawer cabinets over 2'-6" in drawer opening height and shall be attached by means of a dado.

3. Cabinet ends shall be lock jointed to the tops, web frames, stretchers, and bottoms.

4. Fixed shelves, web frames, stretchers, bottoms, and vertical or horizontal divisions shall be dadoed or tenoned into adjoining members.

5. Cabinet bases shall be constructed of 3/4" solid stock or plywood, and shall be an integral base for each cabinet unit. Bases are furnished raw for covering by others.

6. Backs shall be securely dadoed to the case body and intermediate members. Backs shall be rabbeted into exposed ends.

7. Wood anchor strips shall be minimum of 1/2" x 2-1/2" and provided at the top and bottom of the cabinet back.

8. Adjustable shelves shall be adjustable on 1" centers and supported on KV 346 set in drilled holes.

9. Drawers:

- a. Drawer sides shall be blind dovetailed into the front and securely glued and stapled.
- b. Drawer backs shall be dadoed into drawer sides, securely glued and stapled.
- c. Drawer front and sides shall be plowed to receive drawer bottoms and shall be securely glued or glue blocked. Trays or bins shall be similarly constructed.
- d. Drawers shall be supported on metal slides with provision incorporated to stop the drawer in both the in and out position.

- e. File drawers shall:
 - 1. Have slotted bottom and shall be provided with a follower mechanism, or
 - 2. Shall be sized to receive a metal rack support system such as Pendaflex. Rack is not included unless so specified. Legal or Letter as noted.
 - f. Drawers shall show a maximum vertical gap of 3/32" and maximum horizontal gap of 5/32" between adjacent drawers or doors.
10. Doors:
- a. Using completely concealed self-closing hinges
 - 1. Doors to and including 48" in height shall be equipped with two hinges.
 - 2. Doors 49" to 94" in height shall be equipped with three hinges.
 - 3. Doors over 94" in height shall have four hinges.
 - b. Frameless sliding glass doors (not small) shall be installed on ball bearing carriers with metal track and top guide. Each panel shall have an insert type finger pull.
 - c. Doors shall show a maximum vertical gap of 3/32" and a maximum horizontal gap of 5/32" between adjacent drawers or doors.

2.7 COUNTERTOPS

- A. The following provisions apply to both standard laminated plastic covered counters.
- 1. Core material shall be 45 pound density 3/4" thickness industrial grade particleboard. Core material at sinks shall be 3/4" A/C plywood.
 - 2. Top surface laminated plastic shall 0.05" general purpose type and shall be securely glued to the core with type II adhesive as recommended by the adhesive manufacturer. In addition to meeting the requirements of Type II adhesive, the adhesive shall meet the Heat Resistant Test Requirements set forth in the W.I.C. master specification glossary. The underside of tops and splashes with particleboard core shall have a backing sheet securely glued with the identical glue and under identical circumstances as the face sheet.
 - 4. Exposed edges of core material shall be neatly and entirely covered by trim.
 - 5. Holes for sinks or cooking tops will be cut.
 - 6. Joints shall be neatly and carefully made and to be water-tight. colorless silicone sealer shall be used in all butt joints. Connecting surfaces shall not be scissored. Not less than two Knappe and Vogt No. 510 fasteners shall be installed at each deck butt joint.

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ARCHITECTURAL CASEWORK

7. All exposed edges shall be eased.
8. Provide a 1" radius at all outside corners of countertops.
9. On any laminated plastic top the longest sheet available and required shall be used. If more than one sheet is required, lengths shall be the longest reasonably usable. With more than one sheet per top, color match is required.
10. End splashes shall be furnished for butt joint installation at all tops against a wall.
11. Where self-edging is used to line a sinkhole, the self-edging shall extend to the underside of the deck. Self-edging is not required at self-rimming sinks.
12. Contractor to verify with Owner, number and location of slots and holes through countertop for paper and cord access. Provide plastic trim pieces at holes. Provide PVC edge band at paper access.
13. Countertop support braces are to be fabricated and installed where indicated on drawings or where required (if not shown), in a manner to allow clearance for free movement of knees, beneath supports without hindrance.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install casework in accordance with the referenced Quality Standards for fabrication and installation in the field.
- B. All cabinets and casework shall be plumb, level, true and securely fastened in place. Scribe to adjacent surfaces.
- C. Care shall be taken that front edges of counter tops are carefully aligned.
- D. All required fillers, transitions, scribes and corner assemblies shall be properly attached in a neat and permanent manner. Fillers are required at gaps between cabinets in walls including fronts, tops of tall cabinets and tops of open corners.
- E. All installation shall be done by experienced craftsmen working.
- F. At completion of installation, all adjustable shelves shall be set, all units shall be brushed clean, and the installation shall be examined to verify it is a first-class assembly. Adjust doors, drawers and hardware to function smoothly and properly.

- G. Install casework plumb and level. Shim as necessary using concealed shims. Scribe to adjacent surfaces.
- H. Anchor wall units securely to wall to obtain loading requirements required by code. Indicate methods on shop drawings.
- I. Cabinets secured to floor shall be attached to blocking which has been secured to floor.
- J. All work shall be assembled at the mill insofar as is practical, in sections and lengths as required to be accessible to locations in the building. Deliver casework to the job ready to set in place.

SECTION 07600 - FLASHING AND SHEET METAL

PART I - GENERAL

- 1.1 THIS SECTION includes metal flashings, roof jacks, splash pans, downspouts, and other miscellaneous sheet metal items.
- 1.2 QUALITY ASSURANCE:

- A. Building Code: California Building Code most recent edition with current State and local amendments.
- B. In addition to complying with pertinent codes and regulations of all governmental agencies having jurisdiction, unless otherwise specifically directed or permitted by the Architect, comply with the recommendations contained in the most recent editions of the following publications:

Architectural Sheet Metal Manual

published by:

Sheet Metal and Air Conditioning Contractors National Association

P.O. Box 22130

Chantilly, VA 22022

(703) 803-2980

The NRCA Construction Details

published by:

The National Roofing Contractor's Association

O'Hare International Center

10255 W. Higgins Road, Suite 600

Rosemont, IL 60018

(708) 299-9070

PART 2 - PRODUCTS

- 2.1 FLASHING: 16 oz. copper or stainless steel unless otherwise noted on the drawings. Fold, bead or return exposed edges for rigidity and appearance. Fabricate with flat-lock seams.
- 2.2 ROOF JACKS: Performed neoprene or 16 oz. copper.
- 2.3 NAILS, SCREWS, BOLTS, CLIPS: Of a material that will not support galvanic action.

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FLASHING AND SHEET METAL

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- 2.4 GUTTERS: 6" deep nominal custom fabricated 16 oz. Copper fascia gutters, solder all joints..
- 2.5 DOWNSPOUTS: 3" (min.) square custom fabricated 16 oz. Copper downspouts, solder all joints. Size downspouts to flow.
- 2.6 LEAF GUARDS CONTINUOUS AT ALL GUTTERS: Amerimax Home #8519812 "Amerimax Gutter Guard" insert debris filter, black, plastic.
- 2.7 SPLASHBLOCKS: Precast concrete, one at each downspout outlet which is not connected to the rainwater leader system.

PART 3 -EXECUTION

- 3.1 EXPANSION JOINTS: Provide where shown and otherwise as necessary to properly compensate for thermal expansion and contraction.
- 3.2 JOINTS AND SEAMS: Form and/or solder to provide watertight work throughout.
- 3.3 The use of pop rivets in any condition, which will be exposed on the finish surface of the project, is not allowed unless approved by the Architect in advance.
- 3.4 SEPARATE dissimilar metals and protect against galvanic action with a minimum 15-mil coating of bituminous mastic.
- 3.5 ANCHOR WORK permanently in place with non-corrosive fasteners.
- 3.6 INSTALLATION: For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. All such items required by the installation instructions shall be provided by the Contractor at no additional cost to the Owner.
- 3.7 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. In addition, provide a 5-year warranty, in writing, to replace any or all joints failing within the warranty period at no cost to the Owners, labor and material inclusive. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

SECTION 07900 - SEALANTS

PART 1 - GENERAL

- 1.1 THIS SECTION includes all general sealing work required throughout the project.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. Energy Requirements: All materials and workmanship shall comply with the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Building Energy Efficiency Standards published by the California Energy Commission.
 - C. Comply with provisions of most recent edition of "Sealants and Caulking Spec Guide G07920" published by Construction Specifications Institute.
- 1.3 WARRANTY: Provide a 5-year warranty, in writing, to replace any or all joints failing within the warranty period at no cost to the Owners, labor and material inclusive.

PART 2 - PRODUCTS

- 2.1 Materials, General
 - A. Compatibility: Provide joint sealers, joint fillers and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
 - B. Colors: Provide color of exposed joint sealers indicated or, if not otherwise indicated, as selected by the Architect from manufacturer's standard colors.
 - C. Exterior joints
 - 1. Between metal frames and cast concrete, brick, masonry use Mono (acrylic terpolymer) manufactured by Tremco Commercial Construction Sealants, 3735 Green Road, Beachwood, OH 44122, (800) 321-7906 **or** Vulkem 116 (polyurethane) manufactured by Mameco International, Inc., 4475 East 175th Street, Cleveland, Ohio 44128-3599, (800) 321-6412 and distributed by Harold A. Price and Company, Inc., 555 South 12th Street, P.O. Box 1389, Richmond, Ca. 94802, (800) 772-2521
 - 2. Expansion and control joints in concrete, use Vulkem 45 (polyurethane) by Mameco.
 - 3. Exterior sills, jambs, heads of windows, doors, openings, trim, etc., wood to wood connections, use Vulkem 116 or Mono.

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4. Glass to wood, use Mono.
5. Glass to glass, glass to metal, or glass to concrete: use Spectrem 2 by Tremco. Note: For maximum expansion conditions use Spectrem 1 by Tremco.
6. Glazing tape: Tremco 440 (polyisobutylene)

D. Interior:

1. Tile to masonry, tile to tile: Hydroment/Chem-Calk 900 (urethane) manufactured by Bostik, Inc. Boston Street, Middleton, MA. 01949; Bostik Western Headquarters 500 West 17th Street, Long Beach, Ca. 90813, (800) 523-6530.
2. Tile to tile, horizontal joints in water exposed situations: Hydroment/Chem-Calk 550.
3. Expansion joints: Sonolac (acrylic latex) manufactured by Sonneborn Building Products, A Division of Chemrex Inc., 7711 Computer Avenue, Minneapolis, MN 55435, (800) 433-9517
4. Acoustical caulking: Sonolac.
5. Sealing cracks, baseboards, window frames, plumbing fixtures to tile, wood, etc.: Lexel (copolymer rubber) as manufactured by Sashco Sealants Inc. 10300 East 107th Place, Brighton, Colorado 80601, (800) 767-5656

- E. Concrete waterproofing: Clear Seal: Sonneborn Penetrating Sealer #20.

PART 3 - INSTALLATION

3.1 GENERAL:

- A. Use and install per manufacturer's instructions to achieve effective adhesion and secure the work against penetration by water.
- B. Clean joint surfaces and prime as recommended by manufacturer.
- C. Accurately apply in one continuous operation to full depths and widths of joints or pockets. Surface shall have a thoroughly neat, extruded appearance when complete.
- D. Joint Width: As shown or 1/4" minimum and 1" maximum. Joint depth approximately one-half of joint width with a minimum depth dimension of 1/4".
- E. Support sealants from back with construction as shown or with backer rod.
- F. Sealant work shall precede asphaltic work, or painting.

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G. Clean adjacent surfaces free from caulking and sealant smears.

3.2 INSTALLATION: For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. All such items required by the installation instructions shall be provided by the Contractor at no additional cost to the Owner.

3.3 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. In addition, provide a 5-year warranty, in writing, to replace any or all joints failing within the warranty period at no cost to the Owners, labor and material inclusive. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

SECTION 083300 – ROLLING COUNTER DOORS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Manual operated rolling counter doors.
- B. Related Sections:
 - 1. 055000 Misc. Metal.
 - 2. 061000 Rough Carpentry.
 - 3. 099000 Painting.

1.2 SUBMITTALS

- A. Reference Section 01340 Submittal and Substitutions; submit the following items:
 - 1. Product Data
 - 2. Shop Drawings: Include special conditions not detailed in Product Data. Show interface with adjacent work.
 - 3. Quality Assurance/Control Submittals:
 - a. Provide manufacturer ISO 9001:2015 registration
 - b. Provide manufacturer and installer qualifications - see below
 - c. Provide manufacturer's installation instructions
 - 4. Closeout Submittals:
 - a. Operation and Maintenance Manual
 - b. Certificate stating that installed materials comply with this specification

1.3 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer Qualifications: ISO 9001:2015 registered and a minimum of five years experience in producing counter doors of the type specified
 - 2. Installer Qualifications: Manufacturer's approval

1.4 DELIVERY STORAGE AND HANDLING

- A. Reference Section 016400 Product Storage and Handling Requirements.
- B. Follow manufacturer's instructions.

1.5 WARRANTY

- A. Standard Warranty: Two years from date of shipment against defects in material and workmanship.
- B. Maintenance: Submit for owner's consideration and acceptance of a maintenance service agreement for installed products.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer:
Cornell: 24 Elmwood Avenue, Mountain Top, PA 18707. Telephone:
(800) 233-8366.
- B. Alternates:
 - 1. Cookson
 - 2. Clopay

2.2 PRODUCT INFORMATION

- A. Model: ESC10

2.3 MATERIALS

- A. Curtain:
 - 1. Slat Configuration:
 - a. Aluminum: No. 1F, interlocked flat-faced slats, 1-1/2 inches high by 1/2 inch deep, minimum 0.040 inch aluminum with extruded tubular aluminum bottom bar with continuous lift handle and vinyl astragal.
 - 2. Finish:
 - a. Aluminum: Clear anodized
- B. Endlocks:
Fabricate interlocking slat sections with high strength molded nylon endlocks riveted to ends of alternate slats.
- C. Guides:

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ROLLING COUNTER DOORS

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1. Fabrication:
 - a. Aluminum: Heavy duty extruded aluminum sections with snap-on cover to conceal fasteners. Provide polypropylene pile runners on both sides of curtain to eliminate metal to metal contact between guides and curtain.
 2. Finish:
 - a. Aluminum: Clear anodized
- D. Shaft Assembly:
1. Counterbalance Shaft Assembly:
 - a. Barrel: Steel pipe capable of supporting curtain load with maximum deflection of 0.03 inches per foot of width.
 - b. Spring Balance: Oil-tempered, heat-treated steel helical torsion spring assembly designed for proper balance of door to ensure that maximum effort to operate will not exceed 25 lbs. Provide wheel for applying and adjusting spring torque.
- E. Brackets:
- Fabricate from reinforced steel plate with bearings at rotating support points to support counterbalance shaft assembly and form end closures
1. Finish:
 - a. Standard: Zirconium treatment followed by a gray baked-on polyester powder coat; minimum 2.5 mils cured film thickness
- F. Hood:
- Minimum 0.040 inch aluminum with reinforced top and bottom edges.
1. Finish:
 - a. Aluminum: Clear anodized

2.4 OPERATION

- A. Manual Operation:
1. Push-Up: Manual lift or pole with hook

2.5 ACCESSORIES

- A. Locking:
1. Masterkeyable cylinder lock: Operable from coil of bottom bar.
 - a. BEST 7-Pin

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates upon which work will be installed and verify conditions are in accordance with approved shop drawings.
- B. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates.
- C. Commencement of work by installer is acceptance of substrate.

3.2 INSTALLATION

- A. Install door and operating equipment with necessary hardware, anchors, inserts, hangers and supports.
- B. Follow manufacturer's installation instructions.

3.3 ADJUSTING

- A. Following completion of installation, including related work by others, lubricate, test, and adjust doors for ease of operation, free from warp, twist, or distortion.

3.4 CLEANING

- A. Clean surfaces soiled by work as recommended by manufacturer.
- B. Remove surplus materials and debris from the site.

3.5 DEMONSTRATION

- A. Demonstrate proper operation to Owner's Representative.
- B. Instruct Owner's Representative in maintenance procedures.

END OF SECTION

- 3.2 WALL/PARTITION BOARDS: Install vertically to avoid butt end joints wherever possible. At high walls or other conditions where butt end joints are unavoidable, install boards horizontally with end joints staggered over studs.
- 3.3 SCREWING: As recommended by manufacturer.
- 3.4 TRIM:
 - A. Install metal corner beads at all exterior corners.
 - B. Install metal edge trim wherever edge of gypsum board would otherwise be exposed or semi-exposed.
- 3.5 SEALING: Fully seal all edges and penetrations through gypsum board in bathrooms, kitchen and other areas subject to moisture or water. Clean and pre-treat surfaces to receive sealant in accordance with manufacturer's instructions.
- 3.6 FINISHING:
 - A. All gypsum board surfaces to achieve Level 4 finish as per GA-214 specifications.
 - B. Apply treatment at all joints, trim flanges, penetrations and fasteners as required to provide smooth flat, true surface for painting.
- 3.7 WARRANTY: During the first year of occupancy, the Contractor shall inspect the gypsum board finish for cracks, nail pops and other finish imperfections and shall repair and repaint all such imperfections in the finish at no cost to the Owner.

SECTION 09770 - FIBERGLASS REINFORCED PLASTIC PANELS

PART 1 - GENERAL

- 1.1 THIS SECTION includes Special wall surfaces, including fiberglass reinforced plastic panels, mouldings and adhesives.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with all current State and local amendments.
 - B. ASTM International: ASTM D2583 Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.
 - C. ASTM D5420 Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of a Striker Impacted by a Falling Weight (Gardner Impact).
 - D. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
 - D. PERFORMANCE REQUIREMENTS: Provide fiberglass reinforced plastic (FRP) panels that have been manufactured and installed to maintain performance criteria stated by manufacturer without defects, damage or failure. Panels shall have at a minimum normal water absorption property of 0.4% and a normal coefficient of linear expansion of 1.7×10^{-5} .
 - E. Installer Qualifications: Installer should be experienced in performing work of this section and should have specialized in installation of work similar to that required for this project.
 - F. Manufacturer Qualifications: Manufacturer should be capable of providing field service representation during construction and should be capable of approving application method.
- 1.3 SUBMITTALS AND SAMPLES
 - A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 01 Submittal Procedures Section.
 - B. Product Data: Submit product data, including manufacturer's product sheet, for specified products. Indicate physical dimensions, features, adhesive, moulding, anchorage details and rough-in measurements.
 - C. Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors, patterns and textures. Indicate location and dimension of joints and fastener attachment.
 - D. Samples: Submit selection and verification samples for finishes, colors and textures. Submit 2 samples of each type of panel, trim and fastener.

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F. Quality Assurance Submittals: Submit the following:

1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
2. Certificates: Product certificates signed by manufacturer certifying materials comply with specified performance characteristics, criteria and physical requirements.
3. Manufacturer's Installation Instructions.

G. Closeout Submittals: Submit the following:

1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
2. Warranty: Warranty documents specified herein

1.4 DELIVERY, STORAGE & HANDLING

- A. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact. Package sheets on skids or pallets for shipment to project site.
- C. Storage and Protection: Store materials protected from exposure to harmful weather conditions and at temperature and humidity conditions recommended by manufacturer. Store panels indoors in a dry place at the project site
- D. Handling: Remove foreign matter from face of panel by using a soft bristle brush, avoiding abrasive action.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements:
 1. Installation shall not begin until building is enclosed, permanent heating and cooling equipment is in operation, and residual moisture from plaster or concrete work has dissipated.
 2. During installation, and for not less than 48 hours before, maintain an ambient temperature and relative humidity within limits required by type of adhesive used and recommendation of adhesive manufacturer.
 3. Provide ventilation to disperse fumes during application of adhesive as recommended by adhesive manufacturer.
- B. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

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FIBERGLASS REINFORCED PLASTIC PANELS

1.6 WARRANTY

- A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Documents.
- B. Warranty Period: 10 years commencing on Date of Substantial Completion.

1.7 MAINTENANCE

Extra Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Furnish quantity of units equal to 5% of amount installed.

PART 2 - PRODUCTS

2.1 FIBERGLASS REINFORCED PLASTIC (FRP) PANELS

A. Manufacturer: Crane Composites, Inc. Contact: Joliet Sales Office, PO Box 2429, Joliet, IL 60434; Telephone: (800) 435-0080, (815) 467-8600; Fax: (815) 467-8666; E-mail: salesjol@cranecomposites.com; website: www.glasbord.com

B. Kemlite Fiberglass Reinforced Plastic (FRP) Panels.

1. Glasbord Panels:

- a. FRP Face: Fire-X
- b. Color: 85 white
- c. Size: as indicated on drawings.
- d. Moldings: Provide harmonizing PVC (polyvinyl chloride) moldings in color to match panels.
- e. Rivets: In harmonizing colors in areas where there are large fluctuations in temperature and/or humidity, where the substrate is unusually uneven, and in all low temperature or cold storage applications. Refer to "Installation Guide #6211" for rivet pattern and installation instructions

2. Kemply Panels:

- a. FRP Face: Fire-X
- b. Color: 85 white
- c. Size: as indicated on drawings.
- d. Moldings: Provide harmonizing PVC (polyvinyl chloride) moldings in color to match panels.

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FIBERGLASS REINFORCED PLASTIC PANELS

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- e. Rivets: In harmonizing colors in areas where there are large fluctuations in temperature and/or humidity, where the substrate is unusually uneven, and in all low temperature or cold storage applications. Refer to "Installation Guide #6211" for rivet pattern and installation instructions.

2.2 MANUFACTURED UNITS

A. Kemlite Fire-X Glasbord Fiberglass Panels with *Surfaseal* Surface Protection:

1. Rating:

- a. Fire-X Glasbord Underwriters Laboratories, Inc. (UL) classified, Class I (A) Interior Finish Material.
- b. Fire-X Glasbord FM Class I (A) Interior Finish Material, Factory Mutual approved per Standard 4880, Test Report 2B2A2.AM.

- 2. Wall Panels: Finish, thickness and color shall be: Embossed 0.12 inch (3.05 mm) Fire-X Glasbord with *Surfaseal* Color: 85 white.

- 3. Lay-In Ceiling Panels: Finish, thickness and color to be Embossed 0.12 inch (3.05 mm) Fire-X Glasbord with *Surfaseal* color: 85 white:

- 4. Performance Properties: Provide products with the following properties:

- a. Underwriters Laboratories, Inc. (UL), Classified - Embossed standard Fire-X Glasbord 0.09 inch (2.3 mm) only
- b. Class A flamespread of less than 25, smoke developed less than 450 per ASTM E84 latest version.
- c. Barcol Hardness (scratch resistance) of 55 as per ASTM D2583.
- d. Panels will exhibit no more than a 0.038% weight loss after a 25 cycle Taber Abrasion Test using CS-17 abrasive wheels with 1000 g weight.
- e. Gardner Impact Strength of 40 in-lb (4.5 J) showing no visible damage on front side per ASTM D5420.
- f. FMRC (Factory Mutual Research Corporation) approved Fire-X Glasbord FM.
- g. Meets USDA/FSIS requirements.
- h. Complies with ICBO Report Number 4583.
- i. Complies with ICBO Report Number 4583.

B. Kemlite Fire-X Glasbord Fiberglass Panels with *Surfaseal* Surface Protection:

1. Rating: Class III (C) Interior Finish.
2. Wall Panels: Finish, thickness and color shall be: Smooth 0.075 inch (1.9 mm) Glasbord-PSI with *Surfaseal* Color: 85 white.
3. Lay-In Ceiling Panels: Finish, thickness and color shall be: Embossed 0.12 inch (3.05 mm) Glasbord-PWI with *Surfaseal* Color: 85 white.
4. Performance Properties: Provide products with the following properties:
 - a. Class C flamespread of 200 or less, smoke developed of 450 or lower per ASTM E84 latest version.
 - b. Barcol Hardness (scratch resistance) per ASTM D2583 of:
 1. 35 for embossed 0.09 inch (2.3 mm) Glasbord-P.
 2. 55 for embossed 0.12 inch (3.05 mm) Glasbord-PWI.
 3. 55 for smooth 0.075 inch (1.9 mm) Glasbord-PSI.
 4. 60 for embossed 0.10 inch (2.5 mm) Glasbord-CGI.
 - c. Panels shall exhibit no more than a 0.038% weight loss after a 25 cycle Taber Abrasion Test using CS-17 abrasive wheels with 1000 g weight.
 - d. Meets USDA/FSIS requirements.
 - e. Complies with ICBO Report Number 4583.
 - f. A means of frontside identification and confirmation of meeting Class III (C) the interior finish requirement after installation and while in service (without labels) embossed panels only.

C. Kemlite Kemply Fiberglass Laminated Wall Panel with *Surfaseal* Surface Protection:

1. Wall Panel: Manufacturer's standard factory laminated panel with specified substrate and specified skin (single or double sided as indicated); size shall be 4 feet × 8 feet.
2. Wall Panel Substrate:
 - a. Gypsum Substrate: 5/8 inch (15.9 mm) Firecode-X.
 - b. Plywood Substrate: 1/2 inch (12.7 mm) BCX-Fir, or 5/8 inch (15.9 mm) BCX-Fir..
 - c. Oriented Strand Board (OSB) Substrate 3/8 inch (9.5 mm) OSB, or 1/2 inch (12.7 mm) OSB..
3. Wall Panel Skin:

- a. Class C Skin: 0.075 inch (1.9 mm) smooth Glasbord-PSI..
 - b. Class A Skin: 0.075 inch (1.9 mm) smooth Glasbord-FSI
- D. Kemlite Kemply Fiberglass Laminated Lay-In Ceiling Panel with *Surfaseal* Surface Protection:
- 1. Lay-In Ceiling Panels: Manufacturer's standard factory laminated panel with specified substrate and specified skin; size shall be 23 3/4 inches × 23 3/4 inches (0.6 × 0.6 m)] or 23 3/4 inches × 47 3/4 inches (0.6 × 1.21 m). Panels shall meet USDA/FSIS requirements.
 - 2. Lay-In Ceiling Panel Substrate:
 - a. Gypsum Substrate: 5/8 inch (15.6 mm) Firecode-X.
 - b. Fluted Polypropylene Substrate: 0.40 inch (10.2 mm) white.
 - 3. Lay-In Ceiling Panel Skin:
 - a. Class C Skin: 0.075 inch (1.9 mm) smooth Glasbord-PSI..
 - b. Class A Skin: 0.075 inch (1.9 mm) smooth Glasbord-FSI.

2.3 ACCESSORIES

Adhesive and attachment hardware: Provide panel adhesive and attachment hardware as recommended by panel manufacturer appropriate for component and substrate.

2.4 SOURCE QUALITY:

Obtain fiberglass reinforced plastic (FRP) panels from a single manufacturer. Provide panels and molding only from manufacturer specified to ensure warranty and color harmonization of accessories.

PART 3 - EXECUTION

- 3.1 MANUFACTURER'S INSTRUCTIONS: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.
- 3.2 EXAMINATION
 - A. Site Verification of Conditions: Verify that substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.
 - 1. Examine backup surfaces to determine that corners are plumb and straight, surfaces are smooth, uniform, clean and free from foreign matter, nails are countersunk and joints and cracks are filled flush and smooth with the adjoining surface.
 - 2. Do not begin installation until backup surfaces are in satisfactory condition.
- 3.3 PREPARATION: Prepare surfaces to receive fiberglass reinforced panels according the manufacturer's written installation instructions.
- 3.4 INSTALLATION

- A. Fiberglass Reinforced Panel (FRP) Installation:
 - 1. Use products acceptable to panel manufacturer and install components in accordance with manufacturer's installation instructions, level and plumb, secured rigidly in position.
 - 2. Apply a continuous bead of sealant where panels meet concrete floor.
 - 3. Cut and drill panels with carbide tipped saw blades or drill bits, or cut with snips.
 - 4. Install panels with manufacturer's recommended gap for panel field and corner joints.
 - 5. Pre-drill fastener holes in panels with 1/8 inch (3.2 mm) oversize.
 - 6. For trowel type and application of adhesive, follow adhesive manufacturer's recommendations.
- B. Site Tolerances: Comply with manufacturer's written installation instructions.
- C. Finish Color/Patterns: See Interior Finish Schedule.
- D. Related Products Installation: Comply with manufacturer's written installation instructions.
- 3.5 FIELD QUALITY REQUIREMENTS: Manufacturer's Field Services: Upon Owner's request, provide manufacturer's field service consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions.
- 3.6 CLEAN UP: During the course of the work and upon completion of the work, remove and dispose of excess materials, equipment and debris away from the premises. Leave work area in clean condition
 - A. Cleaning: Remove temporary coverings and protection of adjacent work areas. Repair or replace products that have been installed and are damaged. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance. Remove construction debris from project site and legally dispose of debris.
 - B. Remove any adhesive or excessive sealant from panel face using solvent or cleaner recommended by panel manufacturer.
- 3.7 PROTECTION: Protection: Protect installed product and finish surfaces from damage during construction.
- 3.8 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the

issuance of the Certificate of Substantial Completion. Provide full 12 year warranty against defects in materials and workmanship.

SECTION 09900 - PAINTING

PART 1 - GENERAL

- 1.1 THIS SECTION includes painting and finishing of all exposed interior and exterior surfaces where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.
- A. Definitions:
1. "Paint," as used herein, means coating systems materials including primers, emulsions, epoxy, enamels, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.
- B. Work included: Unless specifically noted otherwise, provide paint finish system for all building elements which are exposed to view in the completed Work.
- C. Work not included:
1. Unless otherwise indicated, painting is not required on surfaces in concealed areas and inaccessible areas such as furred places, foundation spaces, utility tunnels, pipe spaces, and duct shafts.
 2. Metal surfaces of anodized aluminum, stainless steel, chromium plate, copper, bronze, and similar finished materials will not require painting under this Section except as may be so specified.
 3. Do not paint moving parts of operating units; mechanical or electrical parts such as valve operators; linkages; sensing devices; and motor shafts, unless otherwise indicated.
 4. Do not paint over required labels or equipment identification, performance rating, name, or nomenclature.
- 1.2 QUALITY ASSURANCE:
- A. Building Code: California Building Code most recent edition with current State and local amendments.
- B. Paint coordination:
1. Provide finish coats which are compatible with the prime coats actually used.
 2. Review other Sections of these Specifications as required, verifying the prime coats to be used and assuring compatibility of the total coating system for the various substrata.
 3. Upon request, furnish information on the characteristics of the specific finish materials to assure that compatible prime coats are used.
 4. Provide barrier coats over noncompatible primers, or remove the primer and reprime as required.
 5. Notify the Architect in writing of anticipated problems in using the specified coating systems over prime coatings supplied under other Sections.
- 1.3 SUBMITTALS:
- A. Provide Manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.

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- B. Provide Manufacturer's recommended Installation Instructions and Finish System Specifications for use on each surface type scheduled to receive finishes. Maintain copy of Finish System Schedule at job site.

1.4 JOB CONDITIONS

- A. Do not apply solvent-thinned paints when the temperature of surfaces to be painted and the surrounding air temperatures are below 45 degrees F. Unless otherwise permitted by the manufacturers' printed instructions as approved by the Architect.
- B. Weather conditions:
 - 1. Do not apply paint in snow, rain, fog, or mist; or when the relative humidity exceeds 85%; or to damp or wet surfaces unless otherwise permitted by the manufacturers' printed instructions as approved by the Architect.
 - 2. Applications may be continued during inclement weather only within the temperature limits specified by the paint manufacturer as being suitable for use during application and drying periods.

1.5 EXTRA STOCK

- A. Upon completion of the Work of this Section, deliver to the Owner any extra stock equaling 10% of each color, type, and gloss of paint used in the Work, tightly sealing each container, and clearly labeling with contents and location where used.

PART 2 - PRODUCTS

2.1 SCOPE:

- A. Provide all products required for finishes described on Exterior Elevations of the drawings for exterior of building, as described in the Interior Room Finish Schedule of the Drawings for interior finishes or as required to fully coat and protect all exposed interior and exterior surfaces.
- B. Where no finish is specified for exposed surfaces on Exterior Elevations or Room Finish Schedule, use the finish system listed in the Painting Schedule in Part 2 of this Section which is specified for the type of material to be covered. Where the material to be covered is not listed in Part 2 of this Section, provide a paint finish system for the material which is recommended for use on that material as manufactured by the approved paint Manufacturer.

2.2 MANUFACTURERS

- A. Interior and Exterior Paint: Benjamin Moore or equivalent products of other manufacturers, when approved in advance by the Architect.
- B. Exterior Stain: Benjamin Moore or equivalent products of other manufacturers when approved in advance by the Architect.

C. Interior Lacquer Finish: U.S. Cellulose or equivalent products of other manufacturers when approved in advance by the Architect.

D. Exterior Oil Finish: Benjamin Moore or equivalent products of other manufacturers when approved in advance by the Architect.

2.3 UNDERCOATS and THINNERS:

A. Provide undercoat paint produced by the same manufacturer as the finish coat.

B. Use only the thinners recommended by the paint manufacturer, and use only to the recommended limits.

C. Insofar as practical, use undercoat, finish coat, and thinner materials as parts of a unified system of paint finish.

2.4 FINISH COLORS:

A. Architect will select all finish top coat colors from the full range of the paint manufacturer's color line. A maximum of three exterior and four interior colors will be specified. Contractor may provide paint systems using one of the following options:

1. Use paint system of the manufacturer whose color was selected.
2. Specially mix the color chosen by Architects approval.

B. Interior Colors: To be chosen.

C. Exterior Colors: To be chosen.

2.5. APPLICATION EQUIPMENT

A. For application of the approved paint, use only such equipment as is recommended for application of the particular paint by the manufacturer of the particular paint, and as approved by the Architect.

Prior to use of application equipment, verify that the proposed equipment is actually compatible with the material to be applied, and that integrity of the finish will not be jeopardized by use of the proposed equipment.

2.6 FINISH SYSTEMS (Note: Paint Finish Systems referenced in this Schedule are products of Benjamin Moore Paint unless noted otherwise. Equivalent Paint Systems of other paint manufacturers will be considered for substitution.)

FINISH No. H-1

Clear Oil Finish for exposed Redwood decks and railings, wood siding or trim not scheduled for stain or paint finish. (Benjamin Moore C323-10product)

3 coats clear Benjamin Moore or equivalent penetrating oil finish. (Note: backprime all surfaces to receive clear oil finish prior to installation.)

FINISH No. H-2

Stain Finish for exterior siding and trim

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1 coat 637-XX Benjamin Moore Arborcoat Semi-Transparent Stain
or
1 coat 640-XX Benjamin Moore Arborcoat Solid Coat Stain.

FINISH No. H-3

Opaque finish for exterior wood surfaces, Satin Finish

1 coat 023 Fresh Start Exterior Wood Primer
2 coats N103-XX Moorgard Low Lustre House Paint

FINISH No. H-4

Opaque finish for exterior wood surfaces, Semi-Gloss Finish

1 coat 023 Fresh Start Exterior Wood Primer
2 coats N096-XX Moorglo Soft Gloss House Paint

FINISH No. H-5

Painted finish for exposed ferrous metal

1 coat P06 Super Spec HP Alkyd Metal Primer
2 coats P29 DTM Acrylic Semi-Gloss

FINISH No. H-6

Painted finish for exposed galvanized metal: pretreatment as recommended by Manufacturer.

1 coat P04 Super Spec HP Latex Metal Primer
2 coats P29 DTM Acrylic Semi-Gloss

FINISH No. H-7

Opaque for gypsum board, flat finish, latex.

1 coat 372 Eco Spec WB Primer 0 VOC
2 coats N373 Eco Spec WB Flat 0 VOC

FINISH No. H-8

Opaque for gypsum board in bathrooms, kitchen, utility rooms, semi-gloss finish, latex.

1 coat 372 Eco Spec WB Primer 0 VOC
2 coats 376 Eco Spec WB Semi-Gloss 0 VOC

FINISH No. H-9

Opaque for wood paneling, wood trim, doors and cabinets, semi-gloss finish, acrylic latex.

1 coat 372 Eco Spec WB Primer 0 VOC
2 coats 376 Eco Spec WB Semi-Gloss 0 VOC

FINISH No. H-10

Clear Finish for interior wood surfaces

2 coats 422-00 Stays Clear Gloss

Or

2 coats 423-00 Stays Clear Satin

FINISH No. H-11

Clear Lacquer finish for interior cabinets, paneling and trim.

1 coat S157 Mac Lac Sanding Sealer

2 coats F231 Mac Lac High Solid Satin Clear

FINISH No. H-12

Stain and Lacquer finish for interior cabinets, paneling and trim.

1 coat 0234-XX Benwood Penetrating Stain

2 coats F231 Mac Lac High Solid Satin Clear

FINISH No H-13

Clear Urethane finish on wood floors, doors and trim.

2 coats 422-00 Stays Clear Acrylic Polyurethane Gloss

Or

2 coats 423-00 Stays Clear Acrylic Polyurethane Satin

FINISH No H-14

Stain and Urethane finish on wood floors, doors and trim.

1 coat 234-XX Benwood Penetrating Stain

2 coats 422-00 Stays Clear Acrylic Polyurethane Gloss

Or

2 coats 423-00 Stays Clear Acrylic Polyurethane Satin

FINISH No H-15

Clear Marine Spar Varnish on wood floors, countertops, doors and trim.

1 coat 650-08 Master Marine Spar Varnish (thinned 10%)

2 coats 650-08 Master Marine Spar Varnish

FINISH No. H-16

Clear Oil Finish for ceilings, beams and wood trim.

1 coat 50% Turpentine and 50% Boiled Linseed Oil

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1 coat 25% Turpentine and 50% Boiled Linseed Oil

FINISH No. H-17

Oil Finish for Butcher Block Countertops

3 coats sterile mineral oil.

FINISH No. H-18

Wallpaper wall covering

Follow Manufacturer's Instructions for wall surface treatment and wallpaper installation.

FINISH No. H-19

Sealer over ceramic tile and stonework.

Obtain information for each tile or stone product used in the job from the Manufacturer of the product. Apply Manufacturer's recommended sealer product or products using the methods recommended by the Manufacturer. Provide sealer products to satisfy recommended coverages and thicknesses for each application.

Follow sealer manufacturer's written installation instructions for each product and application.

FINISH No. H 20

Opaque for gypsum board, eggshell finish acrylic latex.

1 coat 372 Eco Spec WB Primer 0 VOC

2 coats 374 Eco Spec WB Eggshell 0 VOC

2.4 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 MATERIALS PREPARATION

A. General:

1. Mix and prepare paint materials in strict accordance with the manufacturers' recommendations as approved by the Architect
2. When materials are not in use, store in tightly covered containers.

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3. Maintain containers used in storage, mixing, and application of paint in clean condition, free from foreign materials and residue.

B. Stirring:

1. Stir materials before application, producing a mixture of uniform density.
2. Do not stir into the material any film which may form on the surface, but remove the film and, if necessary, strain the material before using.

3.3 SURFACE PREPARATION

A. General

1. Perform preparation and cleaning procedures in strict accordance with the paint manufacturer's recommendations as approved by the Architect.
2. Remove removable items which are in place and are not scheduled to receive paint finish; or provide surface-applied protection prior to surface preparation and painting operations.
3. Following completion of painting in each space or area, reinstall the removed items by using workmen who are skilled in the necessary trades.
4. Clean each surface to be painted prior to applying paint or surface treatment.
5. Remove oil and grease with clean cloths and cleaning solvent of low toxicity and flash point in excess of 200 degrees F, prior to start of mechanical cleaning.
6. Schedule the cleaning and painting so that dust and other contaminants from the cleaning process will not fall onto wet newly painted surfaces.

B. Preparation of wood surfaces:

1. Clean wood surfaces until free from dirt, oil, and other foreign substance.
2. Smooth finished wood surfaces exposed to view, using the proper sandpaper. Where so required, use varying degrees of coarseness in sandpaper to produce a uniformly smooth and unmarred wood surface.
3. Unless specifically approved by the Architect, do not proceed with painting of wood surfaces until the moisture content of the wood is 12% or less as measured by a moisture meter approved by the Architect.
4. Trim and Siding: Back prime all trim and siding which is to receive paint, clear oil, or stain finish with one coat of sealant or stain as noted in the Finish System. Prime all edges and cut ends of trim and siding prior to installation.

C. Preparation of metal surfaces:

1. Thoroughly clean surfaces until free from dirt, oil and grease.
2. On galvanized surfaces, use solvent for the initial cleaning, and then treat the surface thoroughly with phosphoric acid etch recommended by Paint System manufacturer. Remove etching solution completely before proceeding.
3. Allow to dry thoroughly before application of paint..

3.4 PAINT APPLICATION

A. General

1. Touchup shop-applied prime coats which have been damaged, and touchup bare areas prior to start of finish coats application.
2. Slightly vary the color of succeeding coats.
 - a. Do not apply additional coats until the completed coat has been inspected and approved.

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- b. Only the inspected and approved coats of paint will be considered in determining the number of coats applied.
- 3. Sand and dust between coats to remove defects visible to the unaided eye from a distance of five feet.
- 4. On removable panels and hinged panels, paint the back sides to match the exposed sides.
- B. Drying
 - 1. Allow sufficient drying time between coats, modifying the period as recommended by the material manufacturer to suit adverse weather conditions.
 - 2. Do not proceed with initial painting or application of subsequent coats until surfaces to be coated are completely dry and prepared to receive the specified finish.
- C. Brush applications
 - 1. Brush out and work the brush coats onto the surface in an even film.
 - 2. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, and other surface imperfections will not be acceptable.
- D. Spray application
 - 1. Where spray application is used, apply each coat to provide the hiding equivalent of brush coats.
 - 2. Do not double back with spray equipment to build up film thickness of two coats in one pass.
- E. For completed work, match the approved Samples as to texture, color, and coverage. Remove, refinish, or repaint work not in compliance with the specified requirements.
- F. Miscellaneous surfaces and procedures:
 - 1. Exposed mechanical items:
 - a. Finish electric panels, access doors, conduits, pipes, ducts, grilles, registers, vents, and items of similar nature to match the adjacent wall and ceiling surfaces, or as directed.
 - b. Paint visible duct surfaces behind vents, registers, and grilles flat black.
 - c. Wash metal with solvent, prime, and apply two coats of semi-gloss enamel.
 - 2. Exposed pipe and duct insulation:
 - a. Apply one coat of latex paint on insulation which has been sized or primed under other Sections; apply two coats on such surfaces when unprepared.
 - b. Match color of adjacent surfaces.
 - c. Remove band before painting, and replace after painting.
 - 3. Hardware: Paint prime coated hardware to match adjacent surfaces.
 - 4. Wet areas:
 - a. In toilet rooms and contiguous areas, add an approved fungicide to paints.
 - b. For oil base paints, use 1% phenolmercuric or 4% tetrachlorophenol.
 - c. For water emulsion and glue size surfaces, use 4% sodium tetrachlorophenate.
 - 5. Interior: Use "stipple" finish where enamel is specified.

6. Exposed vents: Apply two coats of heat-resistant paint approved by the Architect.
 7. Touch up all damaged surfaces prior to final acceptance.
- 3.5 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

SECTION 10800 - ACCESSORIES

PART 1 - GENERAL

- 1.1 THIS SECTION includes all toilet room accessories and attachment hardware, where shown on the drawings, as specified herein, and as needed for a complete and proper installation.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. Handicapped Accessibility Requirements: The proposed facility shall conform to all requirements for handicapped accessibility as set forth in the editions of the Title 24 Handicapped Accessibility Standards of the California Administrative Code, and the Federal Americans with Disabilities Act in effect at the time of construction.
- 1.3 SUBMITTALS:
 - A. Provide Manufacturer's Literature and any other additional data needed to prove compliance with the specified requirements. Manufacturer's Literature shall describe all manufactured products proposed for inclusion in the Work of this Section.
 - B. Shop Drawings: Provide shop drawings in sufficient detail to show fabrication, installation, anchorage, and interface of the work of this Section with the work of adjacent trades.
- 1.4 SEQUENCING AND SCHEDULING

Coordinate the work of this Section with the placement of blocking and backing to receive anchor attachments.

PART 2 - PRODUCTS

- 2.1 TOILET ROOM ACCESSORIES
 - A. Anchors and fasteners:
 - 1. Provide anchors and fasteners capable of developing a retaining force commensurate with the strength of the accessory to be mounted, and well suited for use with the supporting construction.

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2. Where exposed fasteners are permitted, provide oval head fasteners with finish matching the accessory.
 3. Use all metal construction with continuous sloping hood, end flushing panels, anchor angles and other anchoring devices in accordance with Manufacturer's recommended installation procedures and Shop Drawings as approved by the Architect.
- B. Provide stainless steel with satin finish on all items furnished under this Section.
- C. Applicable manufacturers:
1. Approved manufacturers include Bobrick, Bradley or other manufacturers approved in advance by the Architect. Provide all items supplied under this Section from a single manufacturer.
 2. Where shown on the Drawings, as specified herein, or as needed for a complete and proper installation, provide the following items manufactured by Bobrick or equal products of other manufacturers approved in advance by the Architect.

<u>Item:</u>	<u>Model Number</u>
Soap dispenser	B-2112
Paper towel dispenser	B-2621

2.2 OTHER MATERIALS

- A. Provide other materials not specifically described but required for a complete and proper installation. The Contractor shall be responsible for installation of all mounting brackets, hardware, clips, fasteners, adhesives, backing in structure, or other materials, and all labor required for complete and proper installation of all toilet room accessories.

PART 3 - EXECUTION

3.1. SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

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3.2 COORDINATION

- A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section. Make all measurements as required in the field to assure proper fit.

3.3 INSTALLATION

- A. Install in place as detailed and in accordance with Manufacturer's recommended installation procedures and Shop Drawings. Seal all penetrations; bed mounting flanges in sealant in conformance with Section 07900 of these Specifications. Anchor all components firmly into position for long life under heavy use.
 - B. All items shall be set in their correct locations as shown in the Drawings and shall be level, square, plumb and in alignment with other Work. All joints between toilet room accessories and building components shall be straight and uniform.
 - C. After installation, the Contractor shall protect exposed portions of the Work furnished under this Section from damage. Touch up all scratches and other defects in the Work furnished under this Section to be permanently and completely invisible to the unaided eye.
- 3.4 WARRANTIES: At the conclusion of the job, the Contractor shall deliver to the Owner full Manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

SECTION 10400 - IDENTIFYING DEVICES

PART 1 - GENERAL

- 1.1 THIS SECTION includes all IDENTIFYING DEVICES where shown on the Drawings, as specified herein, and as required by governmental agencies having jurisdiction, and as needed for a complete and proper installation.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. Electrical Code: California Electrical Code most recent edition with current State and local amendments.
 - C. Fire Code: California Fire Code most recent edition with current State and local amendments.
 - D. Handicapped Accessibility Requirements: The proposed facility shall conform to all requirements for handicapped accessibility as set forth in the editions of the Title 24 Handicapped Accessibility Standards of the California Administrative Code, and the Federal Americans with Disabilities Act in effect at the time of construction.
- 1.3 SUBMITTALS:
 - A. Provide Manufacturer's Literature describing all new manufactured products proposed for inclusion in the Work of this Section.
 - B. Samples: Provide one full size sample of each type of Identifying Device specified in this Section depicting size, lettering and color. Obtain approval of Architect prior to fabricating Identifying Devices.

PART 2 – PRODUCTS

- 2.1 GENERAL:
 - A. When new or additional signs and/or identification devices are provided, or when existing signs and/or identification devices are replaced or altered, the new or altered signs and/or identification devices shall comply as detailed.
 - B. All signs shall conform to the regulations concerning character proportion, pictograms, finish and contrast, and illumination levels and all other requirements contained in the Federal Americans with Disability Act.

- C. All Handicapped Accessible spaces shall display the international symbol of accessibility in the size, location, and position required by the above referenced Handicapped Accessibility Standards.
- D. Type Style: Helvetica Medium
- E. Message Type Size: Conform to the regulations contained in the above referenced Handicapped Accessibility Standards as indicated in the drawings.
- F. Numeral Type Size: Conform to the regulations contained in the above referenced Handicapped Accessibility Standards or as indicated in the drawings.
- G. Plaque color: Blue, equal to color No. 15090 in Federal Standard 595b.
- H. Type or numeral color: White.
- I. Sign material: Plastic
- J. Mounting: Double-sided 1/32" thick vinyl tape, silastic adhesive, or screw mounting, depending on mounting surface.
- K. The INTERNATIONAL SYMBOL OF ACCESSIBILITY shall be the standard used to identify facilities that are accessible to and usable by individuals with disabilities. Elements and spaces of accessible facilities which shall be identified by the International Symbol of Accessibility are:
 - 1. Accessible parking spaces.
 - 2. Accessible building entrance.
 - 3. Accessible sanitary facilities.
- L. COLOR OF SYMBOL: The International Symbol of Accessibility shall consist of a white figure on a blue background. The blue shall be equal to color No. 15090 in Federal Standard 595b.
- M. SIGNAGE AND STRIPPING AT ACCESSIBLE PARKING SPACES: Each parking space reserved for persons with disabilities shall be identified by a reflectorized sign permanently posted immediately adjacent to and visible from each stall or space, consisting of the International Symbol of Accessibility and have required surface stripping.

2.2 SITE ENTRANCE SIGNAGE:

- A. Warning signage regarding unauthorized use of disabled parking spaces shall be posted conspicuously at each entrance to off-street parking facilities, or immediately adjacent to and visible from each stall or space.
- B. Warning signage shall state: "Unauthorized vehicles parking in designated accessible spaces not displaying distinguishing placards or license plates issued for persons with disabilities may be towed away at owner's expense. Towed vehicles may be reclaimed at (to be determined) by telephone (to be determined)".
- C. Blank spaces on sign shall be filled in with appropriate information as a permanent part of the sign.
- D. Size of lettering on signage is a minimum of 1" in height.
- E. Sign(s) is not less than 17" x 22" in size.

2.3 SIGNAGE AND STRIPPING AT ACCESSIBLE PARKING SPACES:

- A. Each parking space reserved for persons with disabilities shall be identified by a reflectorized sign permanently posted immediately adjacent to and visible from each stall or space. Sign shall consist of the International Symbol of Accessibility.
- B. Area of the sign(s) shall not less than 70 square inches.
- C. When posted in a path of travel, the bottom of the sign shall be 80" minimum from the parking space finished grade.
- D. When wall mounted, sign is centered on the wall at the interior end of the parking space at a minimum of 36" from the parking space finished grade, ground or sidewalk.
- E. There shall be an unobstructed view of the sign from the parking space.
- F. Van accessible parking spaces shall have an additional sign mounted below the International Symbol of Accessibility that states "VAN ACCESSIBLE."
- G. There shall be an additional sign mounted below the International Symbol of Accessibility that states "MINIMUM FINE \$250".
- H. STRIPPING: The surface of each accessible parking space shall have a surface identification duplicating either of the following schemes:
 - 1. By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color a

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profile view depicting a wheelchair with occupant (the International Symbol of Accessibility.)

2. By outlining a profile view depicting a wheelchair with occupant (the International Symbol of Accessibility) in white on blue background. The profile view shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space and shall be 36" high by 36" wide.
3. The words "NO PARKING" shall be painted in white on the ground within each access aisle. "NO PARKING" letters shall be a minimum of 12" high and visible to traffic enforcement officials.

2.4 TACTILE EXIT SIGNAGE:

- A. Provide new 6" x 6" tactile exit signs at all accessible exterior exit doors.
- B. Tactile exit signage where provided or elsewhere required shall have the following attributes:
 1. Each grade-level exterior exit door shall be identified by a tactile sign with the word, "EXIT."
 2. Letters on signs are raised 1/32", sans serif uppercase characters and are accompanied by Grade 2 Braille.
 3. Raised characters are between 5/8" and 2" high.
 4. Braille dots are 1/10" on center in each cell with 2/10" space between cells, measured from the second column of dots in the first cell to the first column of dots in the second cell.
 5. Braille dots are raised a minimum of 1/40" above the background.
 6. Characters, symbols and background of signs is eggshell, matte, or other non-glare finish.
 7. Characters and symbols contrast with their background (light characters on a dark background, or dark characters on a light background.)
 8. Letters and numbers on signs have a width-to-height ratio between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10.

9. Signs are installed on the wall adjacent to the latch side of the door. At double leaf doors and when there is no wall space at the latch side, signs shall be placed on the nearest adjacent wall, preferably on the right.
10. Mounting height is 60" from the finish floor to the centerline of the sign.
11. Mounting location allows a person to approach within 3" of the signage without encountering protruding objects or standing within the swing of a door.

2.5 SAFETY SIGNAGE:

- A. Occupancy Sign: Provide maximum occupancy sign in conformance with applicable codes and as directed by the Fire Marshall.
 1. Location: Mount at location required by Codes and Handicapped Accessibility Standards.
 2. Size: As required by Codes and Handicapped Accessibility Standards.
 3. Message Type Size: As required by Codes and Handicapped Accessibility Standards.
 4. Colors: As required by Codes and Handicapped Accessibility Standards.
- B. Signs at accessible egress doors: Provide signage in conformance with applicable codes and as follows:
 1. Location: On the interior side and directly above the egress door.
 2. Message: "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED."
 3. Message Type Size: 1 inch high white letters on a black background.

2.6 OTHER SIGNAGE:

- A. Provide additional signs as directed by the Owner, where shown on the Drawings, as specified herein, as required by governmental agencies having jurisdiction, and as needed for a complete and proper installation.

PART 3 - EXECUTION

- 3.1 **INSTALLATION:** For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specification using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. All such items required by the installation instructions shall be provided by the Contractor at no additional cost to the Owner.
- 3.2 **MOUNT** all signs firmly into position, level, plumb and square with all surfaces to which they are attached.
- 3.3 **WARRANTIES:** At the conclusion of the job, the Contractor shall deliver to the Owner full Manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

SECTION 11400 - APPLIANCES & EQUIPMENT

PART 1 - GENERAL

- 1.1 THIS SECTION includes residential appliances and equipment where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.
- 1.2 QUALITY ASSURANCE:
 - A. Building Code: California Building Code most recent edition with current State and local amendments.
 - B. California Plumbing Code, most recent edition with current state and local amendments.
 - C. California Mechanical Code, most recent edition with current state and local amendments.
 - D. California Electrical Code, most recent edition with current state and local amendments.
 - E. California Fire Code, most recent edition with current state and local amendments.
 - F. Energy Requirements: All materials and workmanship shall comply with the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Building Energy Efficiency Standards published by the California Energy Commission.
 - G. Follow utility supplier instructions for hookups. Provide all work necessary to meet hookup requirements of individual utility suppliers.
- 1.3 SUBMITTALS: Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the work of this Section.

PART 2 - PRODUCTS

- 2.1 Provide all appliances and equipment identified on the plans.

PART 3 - EXECUTION

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APPLIANCES & EQUIPMENT

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- 3.1 INSTALLATION: For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, utility hookups, vents, ducts, dampers, flashing systems, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. The Contractor at no additional cost shall provide all such items required by the installation instructions to the Owner.
- 3.2 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products using in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

SECTION 15320 - FIRE PROTECTION SPRINKLER SYSTEM

PART 1 - GENERAL

1.1 THIS SECTION includes all fire sprinkling equipment and related alarm systems where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.

1.2 QUALITY ASSURANCE:

- A. California Building Code most recent edition with most recent State and local amendments.
- B. California Plumbing Code, most recent edition with most recent state and local amendments.
- D. California Mechanical Code, most recent edition with most recent state and local amendments.
- E. California I Electric Code, most recent edition with most recent state and local amendments.
- F. California Fire Code, most recent edition with most recent state and local amendments.
- G. Meet all requirements for NFPA 13 Fire Suppression System.

1.3 SUBMITTALS:

- A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.
- B. SHOP DRAWINGS: Submit shop drawings fully describing the scope of the proposed work to be provided under this Section. Submit four copies of shop drawings showing details of all components of the Fire Suppression system. Manufacturer's standard drawings are acceptable except for non-standard features such as spacial zoning, control systems, coordination with other trades and required clearance to equipment.
- C. PIPING LAYOUT: Submit layout diagram showing sizes, connection details, support brackets, and layout of all piping that is a part of the Fire Suppression system. Piping layout shall be coordinated with calculations to provide required water delivery to each of the spaces

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FIRE PROTECTION SPRINKLER SYSTEM

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served. Include the following supporting system data in Piping Layout diagram broken down by room number.

1. zone designation
2. water flow deliver
3. loop length
4. flow
5. head pressure

D. CALCULATIONS: Furnish calculations and mechanical design drawings for the building Fire Suppression system indicating the flow rate and pressures used for determining the design of the system and the amount of reserve water needed to supply the system. Calculations shall be signed by a California licensed Fire Protection Engineer.

E. SUBMIT all instruction books, warranties, and parts listed to the Owner prior to final acceptance.

1.4 GENERAL INFORMATION

- A. The plans provide a design concept for the Fire Suppression system. They do not constitute a complete installation guide for a Fire Suppression system. Locations of sprinkler heads are designed in order to coordinate the visual appearance of the ceiling. Shop Drawings shall attempt to conform to the locations given unless Code compliance dictates additional heads.
- B. The installer shall be trained, properly licensed and experienced in the installation of Fire Suppression systems. It is the installer's responsibility to assure the system functions properly, safely, and meets all local, state and regional codes.
- C. Installer to supply and install all materials shown on this plan and all others needed to complete this Fire Suppression system. Also, provide any incidental work not shown or specified, which can be reasonably inferred as belonging to the work necessary to provide the complete system. Include all such items in Shop Drawing submittal.

1.5 JOB CONDITIONS

- A. Site Conditions: Examine the site and all mechanical, electrical, architectural and other drawings and verify all field conditions that will affect the Work. Make allowances for all such conditions in preparing the bid.
- B. Restoration of Damage: repair or replace, as directed by architect, materials and parts of premises that become damaged as a result of installation of work of this Section.

PART 2 - PRODUCTS

- 2.1 Provide all products required for a complete system as approved by all government agencies having jurisdiction over the Project and as required for a complete and proper installation.
- 2.2 **PERFORMANCE CRITERIA:** This is a performance specification written for a Code approved NFPA13 Fire Protection system. Dimensions and details on Drawings indicate typical components and suggested layout. If some requirements of these specifications are difficult to incorporate into your standard system, contact Architect at least 14 days prior to the Bid opening. We will study your suggestions in pre-bid review and issue addenda addressing acceptable alternative systems.
- 2.3 **DISTRIBUTION SYSTEM FOR FIRE SUPPRESSION SYSTEM**
 - A. Piping: Copper or iron to meet code requirements. Layout piping as per relevant code requirements. Diameter size to meet flow requirements. Use copper piping where exposed.
 - B. Fittings: Copper or iron to meet code requirements. Use Manufacturer's recommended pipe cement. Separate all dissimilar metals.
 - C. Sprinkler Heads: Concealed or exposed sprinkler heads as depicted in the Drawings. Use high temperature heads at all locations where conditions could cause accidental activation of the system.
 - D. Fasteners for Piping Layout:
 1. In Walls and Floor: Use Plastic Insert Fittings through joists and studs, as required for support. Use Nail Plates to protect pipe in walls.
 2. Foundation: Protect pipe from differential settling sheer stress by using plastic pipe chases and foam rubber as needed.
 3. Flushing and Purging Manifold: Fabricate manifold from copper or galvanized iron fittings (specified above). Inlet: Hose Bib, air valve. Outlet: Hose Bib, 100 PSI gauge.
 - E. Other piping
 1. Copper: Type L or black iron.
 2. Solder Recommended 95-5, acceptable: 50-Safe, Lead free.
 3. Flux: Laco or Everflux Brand (water soluble) or equal
 - F. Air Elimination and Expansion Chamber: Automatic Air Vent, Flexcon FV-150-1 ½" or equal.
 - G. Water Regulation: Automatic water make-up and pressure regulation.

2.4 CONTROLS

- A. Provide complete Code compliant Riser Assembly with fire department hose connection, back flow valve, flow switch, Gauges and system drain.
- B. Domestic Water Supply and Shut-off valve shall be located on a branch water line downstream from the Fire Sprinkler system.

2.5 COORDINATION

- A. Fire Alarm system must tie into Fire Suppression system and activate when flow to a sprinkler head commences.
- B. Make all connections relays and tie-ins required to provide a flow activated alarm mechanism.

PART 3 – EXECUTION

3.1 DISCREPENCIES

- A. In the event of discrepancy, immediately notify the Architect.
- B. Do not proceed with the installation in areas of discrepancies until all such discrepancies have been fully resolved.

3.2 GENERAL

- A. Installation to follow all applicable state and local building codes and to be installed following conventional practice for Fire Protection Systems.

3.3 INSTALLATION

- A. Provide all products required for a complete system as approved by all government agencies having jurisdiction over the project and as required for a complete and proper installation. Written approval of the installed and tested system by the Fire Marshall in charge shall be presented to the Owner at the conclusion of the job. Delivery of the signed off permit by the Contractor shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.
- B. For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. The Contractor shall

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FIRE PROTECTION SPRINKLER SYSTEM

provide, at no additional cost all such items required by the installation instructions.

- 3.4 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.
- 3.5 COORDINATE installation and connection of the Work with other affected trades.
- 3.6 TEST, ADJUST and balance system for proper operation.
- 3.7 INTERFACE WITH EXISTING WORK: The work involves remodeling of an structure and adding on to it. Prior to submitting a bid, it is the Contractor's responsibility to examine the existing site and structures, and to verify the construction details as well as all other existing conditions which must mesh with new work. Include in the bid price a sum to cover costs of items necessary to perform work. No allowance will be made to a bidder because of a lack of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examinations.
- 3.8 EXISTING SERVICES
 - A. Active Services: When encountered in work, protect, brace, support existing active gas, electric, other services where required for proper execution of work. If existing active services are encountered that require relocation make request in writing for determination. Do not proceed with work until written directions are received. Do not prevent or disturb operation of active services that are to remain.
 - B. Inactive Services: When encountered in work, remove, cap, or plug inactive services. Notify utility companies or municipal agencies having jurisdiction; protect or remove these services as directed.
- 3.9 CUTTING, PATCHING, RESTORING
 - A. Unless otherwise specified, each contractor shall do all cutting, drilling, patching, restoring that may be required in connection with his work, he shall restore work of other contractors damaged by him.

- B. No contractor shall do any cutting that may impair strength of building construction. No holes, except for small screws, may be drilled in beams or other structural members without prior approval.
- C. Patch and/or trim with materials that match existing to correct unsightly conditions caused by remodeling.

SECTION 15400 - PLUMBING

PART 1 - GENERAL

- 1.1 THIS SECTION outlines the general requirements for the plumbing system. the plumbing system is to be provided complete, including but not limited to, installation of plumbing fixtures, piping, controls, trim and accessories, hangers, sleeves, and supports.
- 1.2 QUALITY ASSURANCE:
 - A. Comply with California Plumbing Code most recent edition with current State and local amendments and all other applicable codes and regulations unless stricter standards are indicated.
 - B. All plumbing fittings and fixtures must comply with California Code of Regulations, Title 24, Part 2, Chapter 53 (CCR Title 24) and rules and regulations of the California Energy Commission.
- 1.3 SUBMITTALS:
 - A. Plumbing Fixtures and Fittings: Manufacturer's Literature and color samples.

PART 2 - MATERIALS

- 2.1 GENERAL: Materials and equipment specified or scheduled by manufacturer's number shall include all accessories listed in manufacturer's catalogue as standard with equipment; furnish optional or additional accessories indicated. Where no specific make of material or equipment is mentioned, first class material of reputable manufacturer may be used provided it conforms to the requirements of the system and applicable codes.
 - A. Service: Size in accordance with requirements of Uniform Plumbing Code, for fixture unit demand and available supply flow and pressure.
 - B. Domestic Water Piping: PVC to house; copper Type L or "aquapex" inside building.
 - C. Waste and Vent Piping: ABS or cast iron.
 - D. Supply Fittings: Chrome plated brass. (All fixtures shall have separate stops in water supply unless integral with fitting.)

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- D. Gas Piping: Black steel pipe, in accordance with utility company requirements.
- F. Provide exterior insulation blanket for all water heaters which provides a minimum R-12 insulation value.

- 2.2 FIXTURES AND FITTINGS: Provide all plumbing fixtures, fittings, valves and other items called for in the Specifications and any other piping, vents, drains, traps, fittings, valves, stops or other items required for a complete and proper installation.

PART 3 -EXECUTION

- 3.1 COORDINATE installation and connection of the work with other affected trades.
- 3.2 PIPING: All water supply piping shall be mounted with acoustic pipe isolators. All drain, waste and vent pipe shall be padded where piping at any point is closer than 1/2" to any structural member. Padding shall be a minimum of 1/4" thick resilient padding (carpet padding is acceptable).
- 3.3 SET ALL fixtures level and plumb.
- 3.4 TEST AND ADJUST system after installation as required by applicable codes.
- 3.5 REMOVE ALL labels and clean fixtures ready for use.
- 3.6 THE PLUMBING scope of work calls for combining valves and faucets of different manufacturers. The Contractor shall verify the compatibility of the components with each other to assure proper operation of the combined elements. Contractor shall contract manufacturers prior to ordering fixtures to assure that proper flow and pressure can be obtained using the components specified in the schedule. Where proper operation cannot be assured, report such information to the Architect and substitute fittings by a single manufacturer will be specified for use in the project.
- 3.7 INSTALLATION: For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, special fittings, or other specialty items called for in the installation instructions in order to assure

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PLUMBING

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proper installation. All such items required by the installation instructions shall be provided by the Contractor at no additional cost to the Owner.

3.8 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

3.9 INTERFACE WITH EXISTING WORK: The work involves remodeling of an structure and adding on to it. Prior to submitting a bid, it is the Contractor's responsibility to examine the existing site and structures, and to verify the construction details as well as all other existing conditions which must mesh with new work. Include in the bid price a sum to cover costs of items necessary to perform work. No allowance will be made to a bidder because of a lack of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examinations.

3.10 EXISTING SERVICES

- A. Active Services: When encountered in work, protect, brace, support existing active gas, electric, other services where required for proper execution of work. If existing active services are encountered that require relocation make request in writing for determination. Do not proceed with work until written directions are received. Do not prevent or disturb operation of active services that are to remain.
- B. Inactive Services: When encountered in work, remove, cap, or plug inactive services. Notify utility companies or municipal agencies having jurisdiction; protect or remove these services as directed.

3.11 CUTTING, PATCHING, RESTORING

- A. Unless otherwise specified, each contractor shall do all cutting, drilling, patching, restoring that may be required in connection with his work, he shall restore work of other contractors damaged by him.
- B. No contractor shall do any cutting that may impair strength of building construction. No holes, except for small screws, may be drilled in beams or other structural members without prior approval.

- C. Patch and/or trim with materials that match existing to correct unsightly conditions caused by remodeling.

SECTION 16000 - ELECTRICAL

PART 1 - GENERAL

1.1 THIS SECTION outlines the general requirements for the electrical system. The electrical system includes, but is not limited to, all wiring, devices, grounding, circuit protection, switches, outlets, panel boxes, meters, connectors, accessories and fixtures necessary for a complete installation with all equipment, appliances and controls connected and ready for use. The job entails new construction and interfacing with existing Work.

1.2 QUALITY ASSURANCE:

- A. Building Code: California Building Code most recent edition with current State and local amendments.
- B. Electrical Code: California Electric Code most recent edition with current State and local amendments.
- C. Energy Requirements: All materials and workmanship shall comply with the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Building Energy Efficiency Standards published by the California Energy Commission.
- D. Comply with all applicable local codes and regulations unless stricter standards are indicated.
- E. All equipment, materials, fixtures shall bear U/L label rating. All exterior components and those in bathroom areas shall bear U/L label rating for damp locations.
- F. Accessibility Requirements: All materials and workmanship shall comply with the all requirements for accessibility as set forth in the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Federal Americans with Disabilities Act in effect at the time of construction.

1.3 SUBMITTALS:

- A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.
- B. Submit electrical load calculations for review by Architect.

PART 2 - PRODUCTS

2.1 LOADCENTERS

- A. Manufacturer: Square-D, Westinghouse, ITE, or equivalent.
- B. Construction: Boxes shall be made from cold rolled code gauge sheet steel having multiple knockouts and shall be factory assembled into a single rigid structure. Hinged doors covering all circuit breaker handles shall be included in all trims. Doors shall have a manually operated spring latch.
- C. Finish: Finish shall be medium light gray ASA49 enamel.
- D. Bussing: Bus bars for the mains and cross connectors shall be of copper or tin plated aluminum in accordance with UL standards. Bussing shall be braced throughout to conform to industry standard practice governing short circuit stresses in load centers. Neutral bussing shall have a suitable lug for each outgoing feeder requiring a neutral connection of same ampacity as branch.
- E. Overcurrent Devices: Plug-on type circuit breakers. All breakers shall be full-size. No "half-size", or "wafer-size" breakers shall be allowed.

2.2 METER ASSEMBLIES

- A. General
 - 1. Meter Assemblies shall meet the enclosure requirements established by UL and shall be furnished with a UL label stating the switchboard is "Suitable for use as a Service Equipment" and shall meet the requirements of PG&E as service entrance equipment.
 - 2. Metering sections shall be provided with 5-jaw meter sockets for 120/240V 1 phase 3 wire service. All meter sockets shall be UL approved for "continuous duty".
 - 3. Shall be as manufactured by Square-D, Westinghouse, ITE, GE or equivalent.
 - 4. Underground Termination Facilities: Provide termination facilities in accordance with PG&E standards.

2.3 CONDUIT AND FITTING

A. Rigid Steel Conduit

1. Conduit, rigid steel: full weight, threaded, hot-dip galvanized, inside enameled, conforming to ANSI C80.1.

B. Electrical Metallic Tubing (EMT)

1. Conduit: Shall be formed of cold rolled strip steel, electrical resistance welded continuously along the longitudinal seam and hot-dip galvanized after fabrication. Conduit shall conform to ANSI C90.3 specifications and shall meet UL requirements.

C. Rigid Non-Metallic Conduit

1. Conduit: Carlon schedule 40 PVC.
2. All fittings solvent welded.

2.4 WIRE AND CABLE

A. General

1. Acceptable manufacturers: General Electric Co., Southwire, Triangle, PWC Inc., or equivalent.
2. Conductor material: All wire and cable shall be insulated copper conductors for all wire sizes.
3. Insulation: Insulation shall be THWN-THHN for wire sizes through size 1/0 AWG. For larger sizes insulation shall be THWN, XHHW, THW or as required to suit application.
4. Fixture wire: Type AF
5. Metallic Sheathed Cable: Type MC with ground.
6. Service-Entrance Cable: Type SE with ground.
7. Telephone and computer network cable to be Category Five type communications cable.

8. Minimum conductor size:

Power and lighting branch circuits:	#12 AWG
Small appliance circuits:	#12 AWG
Signal and control circuits under 100 volts:	#14 AWG
Provide low voltage wiring as required in the National Electrical Code.	

2.5 OUTLET BOXES AND COVERS

- A. Standard Outlet Boxes: Galvanized, one-piece, drawn steel, knock-out type of size and configuration best suited to the application indicated on the plans. Minimum box size, 4 inch square by 1-1/2 inch deep.
- B. Switch Boxes: Two inch by 3 inches long, galvanized steel switch boxes shall be used only for the installation of single switches. Install multiple switches in standard gang boxes with raised device covers suitable for the application indicated.
- C. Nonmetallic Outlet Boxes: PVC type nonmetallic boxes, and nonmetallic raised covers as manufactured by Carlon or equivalent may be used in lieu of standard steel boxes in conformance with the requirements of the National Electrical Code.

2.6 SWITCHES AND RECEPTACLES

A. General

- 1. All general purpose 15 and 20 ampere, 125-250 volt receptacles and 120-277 volt switches shall conform to NEMA WD-1 and applicable UL tests.

B. Receptacles:

- 1. Ground fault circuit interrupter receptacle: NEMA type 5-15R residential grade, LEVITON MFG. CO. #6599-W or equivalent.
- 2. Duplex receptacles; NEMA type 5-15R residential grade, LEVITON #5096-W or equivalent. NEMA type 5-20R for damp locations.
- 3. Floor receptacles: Carlon Co, 1-gang rectangular floor box # E976RFB and #E976I cover with stainless steel finish.

- C. Switches: Fifteen and Twenty ampere, 120-277 volts, fast make-slow break, quiet type switch with silver cadmium alloy contacts, binding head terminal screws, back and side wired. All switches shall be of color approved by Architect.

1. Single pole, single throw, residential grade, LEVITON #53501-W or equivalent.
2. Three-way, residential grade, LEVITON 53503-W or equivalent.
3. Dimmer light switch, UL listed, built-in TV/radio interference filter and choke filter, LEVITON 'DECORA' series suitable for type of lamp.

2.7 DEVICE PLATES

- A. Flush Device Plates: residential areas, plates shall be smooth plastic, LEVITON #8600 series or equal, of color approved by Architect.
 1. Outlets installed within the building on exterior walls shall have device plates provided with full-size 1/8" thick rubber neoprene closecell gaskets, with knockouts for receptacles or switches.
- B. Surface Mounted Devices, indoor: Galvanized metal or fit box.
- C. Outdoor, Weatherproof: PVC construction, corrosion resistant, heavy duty, hinged cover flap, and gasket.

2.8 PROTECTIVE DEVICES

- A. Circuit Breakers: Molded case, bolt-on, thermal magnetic type, 40 degrees C. Ambient temperature compensated, fixed mounting, with quick-make, quick-break switching mechanism mechanically trip-free from the operating handle and conforming to applicable codes.
- B. Ratings: Refer to drawings and prepare panel schedules for trip frame and poles required. Minimum short circuit rating for 120/240 volt breakers is 22,000 A.

2.9 IDENTIFYING DEVICES

- A. Panelboard Directories: Shall be typewritten, arranged in numerical order and shall show the number where the circuit is located. The room numbers used shall be verified with the Owner and shall not necessarily be those used in the drawings. Mount directories in a 6"x8" metal frame under glass inside each panelboard.
- B. Wire and Terminal Markers: Self-adhering, pre-printed vinyl with self-laminating wrap around strip. Brady B191 series, Thomas & Betts WSI series, or equivalent.

2.10 TELEPHONE/CATV SERVICE BOXES

- A. Provide recessed, mounted protector box as manufactured by Benner-Nawman, model BN1020 and BN1120W, constructed of galvanized steel, with weather resistant screwed on lid.
- B. Provide box with riser conduit and ground wire per Pac Bell requirements.

2.11 GROUNDING

- A. Enclosures of equipment, raceways, and fixtures shall be permanently and effectively grounded. Provide code sized (unless otherwise indicated) copper, insulated green equipment ground with non-metallic conduit runs. Equipment ground shall originate at panelboard ground bus and shall be bonded to all switch and receptacle boxes and electrical equipment enclosures.
- B. Building services shall be grounded using concrete encased electrode installed in footings, per NEC Article 250. Bonding shall be made to cold water pipe and gas pipe.

2.12 LIGHTING FIXTURES: See Lighting Fixture Schedule.

2.13 ALARM SYSTEM: Provide complete smoke detector system and fire alarm to meet all requirements of applicable codes.

PART 3 -- EXECUTION

3.1 CONDUIT AND RACEWAY APPLICATIONS

- A. Rigid Steel Conduit: For all exposed conduit exposed to mechanical damage.
- B. PVC Conduits: Schedule 40 PVC may be used underground with 3" sand under and 6" sand over when serving lighting circuits and power secondary circuits. PVC conduit may be used exposed at meter assemblies where protected from damage.

3.2 CONDUIT INSTALLATION

A. General

1. Conduit system shall be concealed unless exposed work is clearly called for on the drawings.
2. Conduits shall be tightly covered and well protected during construction using metallic bushings and bushing "pennies" to seal open ends.

3. In all empty conduits or ducts, install a 200-pound tensile strength polyethylene pulling rope.
4. Conduit systems shall be electrically continuous throughout. Install code size, insulated, copper, green grounding conductor in all conduit runs as required by code, or as indicated on drawings.

B. Layout

1. Locations of conduit runs as indicated on site and electrical plans.
2. Where practical, install conduits in groups in parallel, vertical or horizontal runs and at elevations that avoid unnecessary offsets.
3. Exposed conduit shall be run parallel or at right angles to the centerlines of columns and beams.
4. Conduits shall not be placed closer than 12 inches from a parallel hot water or steam line or 3 inches from such lines crossing perpendicular to the runs.

C. Supports

1. All raceway systems shall be secured to the building structures using specified fasteners, clamps and hangers spaced according to code requirements.
2. Support single runs of conduit using one hole pipe straps. Where run horizontally on walls in damp or wet location, install "clamp backs" to space conduit off the surface.

3.3 CABLE AND WIRE INSTALLATION

A. General

1. Conductors shall not be installed in conduit until all work of any nature that may cause injury is completed. Care shall be taken in pulling conductors that insulation is not damaged. UL approved non-petroleum base and insulating type pulling compound shall be used as needed.
2. All cables shall be installed and tested in accordance with manufacturer's requirements and warranty.

B. Splicing and Terminating

1. All aspects of splicing and terminating shall be in accordance with cable manufacturer's published procedures.

2. Make up all splices in outlet boxes with conductors as specified herein with separate tails of correct color to be made up to splice. Provide at least six (6) inches of tails packed in box after splice is made up.

C. Nonmetallic Sheathed Cable and Service Entrance Cable

1. Nonmetallic Sheathed Cable shall be used for feeder to unit loadcenter, as allowed by NEC Article 338.
2. Service Entrance Cable shall be used for feeder to unit loadcenter, as allowed by NEC Article 338.
3. Cables shall comply with NEC Section 300-4 where installed through studs, rafters and similar members.

3.4 INSTALLATION OF BOXES AND WIRING SERVICES

A. General

1. All outlets shall finish FLUSH with building walls and ceiling, except where exposed work is called for. There shall be no gap between box and wall or ceiling material. Any opening between box and wall or ceiling shall be caulked airtight at party wall boxes shall be sealed with approved acoustic sealant.
2. Install raised device covers on all outlet boxes as required to finish flush with surface. Covers shall be of a depth to suit the wall or ceiling finish.
3. Exposed outlet boxes and boxes in damp and wet locations shall be cast metal with gasketed cast metal cover plates.

B. Box Layout

1. Outlet boxes shall be installed at the locations and elevations shown on the drawings or specified herein. Make adjustments to locations as required by structural conditions and to suit coordination requirements of other trades.
2. Outlet boxes in stud walls and partitions shall not be mounted back-to-back nor shall through-wall boxes be permitted.

- C. Mounting Heights: Mounting heights of devices as measured from the top of the faceplate shall be as follows:

Device	Height (Inches)
Convenience receptacles	12
Convenience receptacles above counters or at lavatories unless otherwise noted.	44
Switches, light + 46" at kitchen	48
Telephone Outlet	12

3.5 INSTALLATION OF MANUFACTURED ITEMS

For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. All such items required by the installation instructions shall be provided by the Contractor at no additional cost to the Owner.

3.6 COORDINATE installation and connection of the work with other affected trades.

3.7 TEST, ADJUST and balance system for proper operation

3.8 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

3.9 INTERFACE WITH EXISTING WORK: The work involves remodeling of an structure and adding on to it. Prior to submitting a bid, it is the Contractor's responsibility to examine the existing site and structures, and to verify the construction details as well as all other existing conditions which must mesh with new work. Include in the bid price a sum to cover costs of items necessary to perform work. No allowance will be made to a bidder because of a lack of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examinations.

3.10 EXISTING SERVICES

- A. Active Services: When encountered in work, protect, brace, support existing active gas, electric, other services where required for proper execution of work. If existing active services are encountered that require relocation make request in writing for determination. Do not proceed with work until written directions are received. Do not prevent or disturb operation of active services that are to remain.
- B. Inactive Services: When encountered in work, remove, cap, or plug inactive services. Notify utility companies or municipal agencies having jurisdiction; protect or remove these services as directed.

3.11 CUTTING, PATCHING, RESTORING

- A. Unless otherwise specified, each contractor shall do all cutting, drilling, patching, restoring that may be required in connection with his work, he shall restore work of other contractors damaged by him.
- B. No contractor shall do any cutting that may impair strength of building construction. No holes, except for small screws, may be drilled in beams or other structural members without prior approval.
- C. Patch and/or trim with materials that match existing to correct unsightly conditions caused by remodeling.

SECTION 16821 - INTEGRATED FIRE ALARM and SMOKE DETECTION SYSTEM

PART 1 - GENERAL

- 1.1 THIS SECTION includes all Fire Alarm Systems and related work where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.
- 1.2 QUALITY ASSURANCE:
 - A. California Building Code most recent edition with most recent State and local amendments.
 - B. California Plumbing Code, most recent edition with most recent state and local amendments.
 - D. California Mechanical Code, most recent edition with most recent state and local amendments.
 - E. California I Electric Code, most recent edition with most recent state and local amendments.
 - F. California Fire Code, most recent edition with most recent state and local amendments.
 - G. Meet all requirements for NFPA 72 Fire Alarm System.
 - H. Energy Requirements: All materials and workmanship shall comply with the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Building Energy Efficiency Standards published by the California Energy Commission.
 - I. Accessibility Requirements: All materials and workmanship shall comply with the all requirements for accessibility as set forth in the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Federal Americans with Disabilities Act in effect at the time of construction.

1.3 SUBMITTALS:

- A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.
- B. SHOP DRAWINGS: Submit shop drawings fully describing the scope of the proposed work to be provided under this Section. Submit four copies of shop drawings showing details of all components of the Fire Alarm system. Manufacturer's standard drawings are acceptable except for non-standard features such as spacial zoning, control systems, coordination with other trades and required clearance to equipment.
 - 1. WIRING LAYOUT: Submit layout diagram showing sizes, connection details, support brackets, and layout of all wiring that is a part of the Fire and Intrusion Alarm system.
- C. SUBMIT all instruction books, warranties, and parts listed to the Owner prior to final acceptance.

1.4 GENERAL INFORMATION

- A. This is a Performance Specification for Design and Installation of a complete Integrated Fire Alarm and Smoke Detection System. Locations of sensors, detectors, pull stations and alarms are the responsibility of the Alarm System Contractor. Final installed system shall include all items necessary to obtain Code compliance.
- B. The installer shall be trained, properly licensed and experienced in the installation of Fire and Intrusion Alarm systems. It is the installer's responsibility to assure the system functions properly, safely, and meets all local, state and regional codes.
- C. Installer to supply and install all materials shown on this plan and all others needed to complete this Fire and Intrusion Alarm system. Also, provide any incidental work not shown or specified, which can be reasonably inferred as belonging to the work necessary to provide the complete system. Include all such items in Shop Drawing submittal.

1.5 JOB CONDITIONS

- A. Site Conditions: Examine the site and all mechanical, electrical, architectural and other drawings and verify all field conditions that will affect the Work. Make allowances for all such conditions in preparing the bid.
- B. Restoration of Damage: repair or replace, as directed by architect, materials and parts of premises that become damaged as a result of installation of work of this Section.

PART 2 - PRODUCTS

- 2.1 Provide all products required for a complete system as approved by all government agencies having jurisdiction over the Project and as required for a complete and proper installation.
- 2.2 **PERFORMANCE CRITERIA:** This is a performance specification written for design and installation of a State of California Fire Marshall approved and NFPA 72 approved Integrated Fire Alarm and Smoke Detection System. Pull Stations, Audible and Visual Alarms shall meet the requirements of the ADA and CBC. Contractor shall prepare plans and calculations and obtain approval from the Fire Marshall having jurisdiction over the project prior to commencing with the Work. Contractor shall present approved plans to the Owner and to the Mendocino County Department of Planning and Building Services prior to commencing with the Work.
- 2.3 **FIRE ALARM AND SMOKE DETECTION SYSTEM COMPONENTS**
 - A. In addition to complying with all code regulations, meet all requirements of Electrical Notes on sheet EM-1.
 - B. All wiring for alarm system shall be concealed where possible.
 - C. Provide integrated FACP and IACP control panel with separate readouts for each detection component type.
- 2.4 **COORDINATION**
 - A. Fire Alarm system and smoke detection system must tie into Fire Suppression system and activate when flow to a sprinkler head commences.
 - B. Make all connections relays and tie-ins required to provide a flow activated alarm mechanism.

PART 3 – EXECUTION

- 3.1 **DISCREPENCIES**
 - A. In the event of discrepancy, immediately notify the Architect.
 - B. Do not proceed with the installation in areas of discrepancies until all such discrepancies have been fully resolved.
- 3.2 **GENERAL**
 - A. Installation to follow all applicable state and local building codes and to be installed following conventional practice for Integrated Fire Alarm and Smoke Detection Systems.

3.3 INSTALLATION

- A. Provide all products required for a complete system as approved by all government agencies having jurisdiction over the project and as required for a complete and proper installation. Written approval of the installed and tested system by the Fire Marshall in charge shall be presented to the Owner at the conclusion of the job. Delivery of the signed off permit by the Contractor shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.
- B. For all manufactured products, follow manufacturer's installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. The Contractor shall provide, at no additional cost all such items required by the installation instructions.

3.4 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer's warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer's representatives and to register the product purchases and installations. Warranties shall be registered in the Owner's name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

3.5 COORDINATE installation and connection of the Work with other affected trades.

1.6 TEST, ADJUST and balance system for proper operation.

3.7 INTERFACE WITH EXISTING WORK: The work involves remodeling of a structure and adding on to it. Prior to submitting a bid, it is the Contractor's responsibility to examine the existing site and structures, and to verify the construction details as well as all other existing conditions that must mesh with new work. Include in the bid price a sum to cover costs of items necessary to perform work. No allowance will be made to a bidder because of a lack of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examinations.

3.8 EXISTING SERVICES

- A. Active Services: When encountered in work, protect, brace, support existing active gas, electric, other services where required for proper execution of work. If existing active services are encountered that require relocation make request in writing for determination. Do not proceed with work until written directions are received. Do not prevent or disturb operation of active services that are to remain.
- B. Inactive Services: When encountered in work, remove, cap, or plug inactive services. Notify utility companies or municipal agencies having jurisdiction; protect or remove these services as directed.

3.9 CUTTING, PATCHING, RESTORING

- A. Unless otherwise specified, each contractor shall do all cutting, drilling, patching, restoring that may be required in connection with his work, he shall restore work of other contractors damaged by him.
- B. No contractor shall do any cutting that may impair strength of building construction. No holes, except for small screws, may be drilled in beams or other structural members without prior approval.
- C. Patch and/or trim with materials that match existing to correct unsightly conditions caused by remodeling.