

AGREEMENT NO. _____

Agreement Between the County of Yolo and Madsen Roofing for the Sheriff Administration/Morgue Roof Projects

THIS AGREEMENT, (“Agreement” or “Contract”) made and entered into on this 28th day of September, between the COUNTY OF YOLO, a political subdivision of the State of California (“COUNTY”), and Madsen Roofing, (“CONTRACTOR”), a California corporation.

ARTICLE I. In consideration of the payments and agreements hereinafter mentioned, to be made and performed by the COUNTY, CONTRACTOR shall, at its own cost and expense, furnish all the labor, technical and professional services, supervision, materials, and equipment, except such as are mentioned in the Contract Documents referenced below to be furnished by the COUNTY, and perform all operations necessary to construct and complete in a good, workmanlike and substantial manner and to the satisfaction of the COUNTY, the work described in the Contract Documents for the public work of improvement titled:

**SHERIFF ADMINISTRATION/MORGUE ROOF PROJECT
140 TONY DIAZ DRIVE
WOODLAND, CA 95695
Dated September 28, 2021**

ARTICLE II. Time is of the essence in the performance of the work. The work shall be commenced and completed pursuant to Section 11-5 of the Special Provisions.

ARTICLE III. The COUNTY shall pay to the CONTRACTOR as full compensation for the performance of the Contract, the bid amount of ONE HUNDRED EIGHTY SEVEN THOUSAND NINE HUNDRED AND THIRTY NINE DOLLARS (\$187,939) which is subject to any additions, deductions or change orders as provided in the Contract Documents, and including all applicable taxes and costs not to exceed the maximum amount of TWO HUNDRED SIX THOUSAND SEVEN HUNDRED THIRTY DOLLARS (\$206,730), hereinafter, (the “Contract Price”). Payment shall be made as set forth in the General Provisions. COUNTY will pay to CONTRACTOR compensation based upon the prices set forth in the Bid Schedule.

ARTICLE IV. By its signature hereunder, CONTRACTOR certifies that it is aware of the provisions of Section 3700 of the Labor Code et seq. which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and CONTRACTOR will comply with such provisions before commencing the performance of the work of this contract.

ARTICLE V. CONTRACTOR shall provide indemnification and defense as set forth in the General Provisions.

ARTICLE VI. The “Contract Documents” include the following documents, each of which is incorporated into this Contract by reference:

- (a) Insurance – Exhibit A
- (b) Proposal Response, including all required forms – Exhibit B
- (c) Technical Specification and Drawings – Exhibit C
- (d) Performance and Payment Bond – Exhibit D
- (e) General Provisions, General Conditions, General Requirements and Notice to Contractor – Exhibit E
- (f) Change Orders executed by the COUNTY – Exhibit F

The CONTRACTOR shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. In the event of a conflict, the various Contract Documents will be given effect in the order set forth in the General Provisions.

ARTICLE VII. Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The CONTRACTOR shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this work.

ARTICLE VIII. CONTRACTOR expressly acknowledges that CONTRACTOR is fully cognizant of, fully understands, and unreservedly agrees that, all provisions of the Project Plans and Specifications are absolutely controlling and equally applicable.

ARTICLE IX. CONTRACTOR shall maintain, at its sole cost an expense, the insurance requirements attached hereto as Exhibit A and incorporated herein by this reference throughout the entire term of this Agreement.

ARTICLE X.

- A) It is understood and agreed by all the parties hereto that CONTRACTOR is an independent CONTRACTOR and that no relationship of employer-employee exists between the COUNTY and CONTRACTOR. Neither CONTRACTOR nor CONTRACTOR’s assigned personnel shall be entitled to any benefits payable to employees of the COUNTY. CONTRACTOR hereby indemnifies and holds the COUNTY harmless from any and all claims that may be made against the COUNTY based upon any contention that an employer-employee relationship exists by reason of this Agreement.

- B) It is further understood and agreed by all parties hereto that neither CONTRACTOR nor CONTRACTOR’s assigned personnel shall have any right to act on behalf of the COUNTY in any capacity whatsoever as an agent or to bind the COUNTY to any obligation whatsoever.

- C) It is further understood and agreed by all parties hereto that CONTRACTOR must issue any and all forms required by Federal and State laws for income and employment tax purposes, including W-2 and 941 forms, for all of CONTRACTOR's assigned personnel.

ARTICLE XI. In the performance of the services required by this Agreement, CONTRACTOR shall comply with all applicable Federal, State, and County statutes, ordinances, regulations, directives, and laws. This Agreement shall be deemed to be executed within the State of California and construed in accordance with and governed by the laws of the State of California. Any action or proceeding arising out of this Agreement shall be filed in a California Superior Court located in Woodland, California.

ARTICLE XII. The waiver by COUNTY or any of its officers, agents, or employees or the failure of the COUNTY or its officers, agents, or employees to take action with respect to any right conferred by, or any breach of any obligation or responsibility of this Agreement shall not be deemed to be a waiver of such obligation or responsibility, or subsequent breach of same, or of any terms, covenants, or conditions of this Agreement.

ARTICLE XIII. This Agreement, including all exhibits expressly incorporated therein, constitutes the entire agreement between the COUNTY and CONTRACTOR and supersedes all prior negotiations, representations, or agreements, whether written or oral. In the event of a dispute between the parties as to the language of this Agreement or the construction or meaning of any term hereof, this Agreement shall be deemed to have been drafted by the parties in equal parts so that no presumptions or inferences concerning its terms or interpretation may be construed against any party to this Agreement.

ARTICLE XIV. This Agreement may be amended only by written instrument signed by the COUNTY and CONTRACTOR.

ARTICLE XV. Contractor certifies that any service provided pursuant to this Agreement shall be without discrimination based on color, race, creed, national origin, religion, sex, age, sexual preferences, or physical or mental disability in accordance with all applicable Federal, State and County laws and regulations and any administrative directives established by the County Board of Supervisors or the County Administrative Officer. For the purpose of this Agreement, distinctions on the grounds of color, race, creed, national origin, religion, sex, age, sexual preferences, or physical or mental disability include but are not limited to the following: denying a participant any service or benefit which is different, or is provided in a different manner or at a different time from that provided to other participants under this Agreement; subjecting a participant to segregation or separate treatment in any way in the enjoyment or any advantage or privilege enjoyed by others receiving any service or benefit; treating a participant differently from others in determining whether the participant has satisfied any admission, enrollment quota, eligibility, membership, or other requirement or condition which individuals must meet in order to be provided any service or benefit; and the assignment of times or places for the provision of services.

ARTICLE XVI. Upon its execution, this Agreement (including all exhibits and attachments) shall be subject to disclosure pursuant to the California Public Records Act.

ARTICLE XVII. All notices shall be in writing and either served by personal delivery or mailed to the other party as designated in the Contract Documents. Written notice to the CONTRACTOR shall be addressed to CONTRACTOR's principal place of business unless CONTRACTOR designates another address in writing for service of notice. Notice to the COUNTY shall be addressed to the COUNTY as designated in the Notice to Contractors unless COUNTY designates another address in writing for service of notice. Notice shall be effective upon receipt or five (5) calendar days after being sent by first class mail, whichever is earlier. Notice given by facsimile shall not be effective unless acknowledged in writing by the receiving party.

ARTICLE XVIII. Should a change be contemplated in the name or nature of the CONTRACTOR's legal entity, the CONTRACTOR shall first notify the COUNTY in order that proper steps may be taken to have the change reflected on the Contract and all related documents. No change of CONTRACTOR's name or nature will affect the COUNTY's rights under the Contract, including but not limited to the bonds.

IN WITNESS WHEREOF, the parties to this Agreement have executed this Agreement as of the date set forth above.

COUNTY:

COUNTY OF YOLO

By: _____
Kevin Yarris, Director of General Services

CONTRACTOR:

CONTRACTOR

By: _____

Name: Christian Madsen

Title: President

Licensed in accordance with an act providing for the registration of CA State Contractors, License No. _____

CA Department of Industrial Relations Public Works Contractor Identification Number _____

Attest: Julie Dachtler, Senior Deputy
Clerk, Yolo County Board of Supervisors

By: _____
Deputy (Seal)

Approved as to Form:


By:  _____
Philip J. Pogledich, County Counsel

EXHIBIT A

SERVICE CONTRACT INSURANCE REQUIREMENTS

- A. During the term of this Agreement, Contractor shall at all times maintain, at its expense, the following coverages and requirements. The comprehensive general liability insurance shall include broad form property damage insurance.
1. Minimum Coverages (as applicable) - Insurance coverage shall be with limits not less than the following:
 - a. **Comprehensive General Liability** – \$1,000,000/occurrence and \$2,000,000/aggregate
 - b. **Automobile Liability** – \$1,000,000/occurrence (general) and \$500,000/occurrence (property) [include coverage for Hired and Non-owned vehicles.]
 - c. **Professional Liability/Malpractice/Errors and Omissions** – \$1,000,000/occurrence and \$2,000,000/aggregate (If any engineer, architect, attorney, accountant, medical professional, psychologist, or other licensed professional performs work under a contract, the contractor must provide this insurance. If not, then this requirement automatically does not apply.)
 - d. **Workers' Compensation** – Statutory Limits/**Employers' Liability** - \$1,000,000/accident for bodily injury or disease (If no employees, this requirement automatically does not apply.)
 2. The County, its officers, agents, employees and volunteers shall be named as additional insured on all but the workers' compensation and professional liability coverages. . [NOTE: Evidence of additional insured may be needed as a separate endorsement due to wording on the certificate negating any additional writing in the description box.] It shall be a requirement under this agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the Additional Insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any Insurance policy or proceeds available to the named Insured; whichever is greater.
 - a. The Additional Insured coverage under the Contractor's policy shall be "primary and non-contributory" and will not seek contribution from the County's insurance or self-insurance and shall be at least as broad as CG 20 01 04 13.
 - b. The limits of Insurance required in this agreement may be satisfied by a combination of primary and umbrella or excess Insurance. Any umbrella or

excess Insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the County of Yolo (if agreed to in a written contract or agreement) before the County's own Insurance or self-insurance shall be called upon to protect it as a named insured.

3. Said policies shall remain in force through the life of this Agreement and, with the exception of professional liability coverage, shall be payable on a "per occurrence" basis unless the County Risk Manager specifically consents in writing to a "claims made" basis. For all "claims made" coverage, in the event that the Contractor changes insurance carriers Contractor shall purchase "tail" coverage covering the term of this Agreement and not less than three years thereafter. Proof of such "tail" coverage shall be required at any time that the Contractor changes to a new carrier prior to receipt of any payments due.
4. The Contractor shall declare all aggregate limits on the coverage before commencing performance of this Agreement, and the County's Risk Manager reserves the right to require higher aggregate limits to ensure that the coverage limits required for this Agreement as set forth above are available throughout the performance of this Agreement.
5. Any deductibles or self-insured retentions must be declared to and are subject to the approval of the County Risk Manager. All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any SIR provision shall provide or be endorsed to provide that the SIR may be satisfied either by the named Insured or Yolo County.
6. Each insurance policy shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the Director (ten (10) days for delinquent insurance premium payments).
7. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise approved by the County Risk Manager.
8. The policies shall cover all activities of Contractor, its officers, employees, agents and volunteers arising out of or in connection with this Agreement.
9. For any claims relating to this Agreement, the Contractor's insurance coverage shall be primary, including as respects the County, its officers, agents, employees and volunteers. Any insurance maintained by the County shall apply in excess of, and not contribute with, insurance provided by Contractor's liability insurance policy.

10. The insurer shall waive all rights of subrogation against the County, its officers, employees, agents and volunteers.
- B.** Prior to commencing services pursuant to this Agreement, Contractor shall furnish the County with original endorsements reflecting coverage required by this Agreement. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. All endorsements are to be received by, and are subject to the approval of, the County Risk Manager before work commences. Upon County's request, Contractor shall provide complete, certified copies of all required insurance policies, including endorsements reflecting the coverage required by these specifications.
- C.** During the term of this Agreement, Contractor shall furnish the County with original endorsements reflecting renewals, changes in insurance companies and any other documents reflecting the maintenance of the required coverage throughout the entire term of this Agreement. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. Upon County's request, Contractor shall provide complete, certified copies of all required insurance policies, including endorsements reflecting the coverage required by these specifications. Yolo County reserves the right to obtain a full certified copy of any Insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of right to exercise later.
- D.** Contractor agrees to include with all Subcontractors in their subcontract the same requirements and provisions of this agreement including the indemnity and Insurance requirements to the extent they apply to the scope of the Subcontractor's work. Subcontractors hired by Contractor agree to be bound to Contractor and the County of Yolo in the same manner and to the same extent as Contractor is bound to the County of Yolo under the Contract Documents. Subcontractor further agrees to include these same provisions with any Sub-subcontractor. A copy of the Owner Contract Document Indemnity and Insurance provisions will be furnished to the Subcontractor upon request. The General Contractor/**and or Contractor** shall require all Subcontractors to provide a valid certificate of insurance and the required endorsements included in the agreement prior to commencement of any work and General Contractor/**and or Contractor** will provide proof of compliance to the County of Yolo.
- E.** Contractor shall maintain insurance as required by this contract to the fullest amount allowed by law and shall maintain insurance for a minimum of five years following the completion of this project. In the event Contractor fails to obtain or maintain completed operations coverage as required by this agreement, the County at its sole discretion may purchase the coverage required and the cost will be paid by Contractor.

(DO NOT DETACH)

PROPOSAL

to the
YOLO COUNTY DEPARTMENT OF FINANCE
PROCUREMENT DIVISION
COUNTY OF YOLO

NAME OF BIDDER Madsen Roofing & Waterproofing, Inc.
BUSINESS ADDRESS 5960 Bradshaw Road
CITY, STATE, ZIP Sacramento, CA 95829
TELEPHONE NO: AREA CODE (916) 361-3327
FAX NO.: AREA CODE (916) 361-3370

In response to the Notice to Contractors and in accordance with the Project Plans and Specifications (including the payment of not less than the minimum wage rates set forth therein) and the Contract annexed hereto, the undersigned hereby proposes to the County to furnish all plant, labor, technical and professional services, supervision, materials and equipment, other than materials and equipment specified as furnished by the County, and to perform all operations necessary and required to construct the project in accordance with the provisions of the Plans and Specifications and any addenda thereto, and at the prices stated opposite the respective items set forth in the Bid Schedule.

The Project Plans and Specifications for the work to be done are dated July 29th, 2021 and are entitled:

PLANS AND SPECIFICATIONS
FOR THE
SHERIFF'S ADMIN/MORGUE ROOF PROJECT
2500 E. GIBSON ROAD
WOODLAND, CA 95776

The undersigned certifies that it has examined and is fully familiar with all of the provisions of the Plans and Specifications and any addenda thereto; that it has carefully checked all of the words and figures shown in its Bid Schedule; that it has carefully reviewed the accuracy of all statements in this proposal and attachments hereto; and that it understands and agrees that the

County will not be responsible for any errors or omissions on the part of the undersigned in preparing this proposal.

The undersigned has by careful examination of the Plans and Specification and any addenda thereto, and by examination of the actual site conditions, satisfied itself as to the nature and location of all work, the general and local conditions to be encountered in the performance of any work, the requirements of the Contract and all other matters which can in any way affect the work or the cost thereof.

This proposal constitutes a firm offer to the County which cannot be withdrawn for 120 days after the date set for opening of proposals, or until a contract is executed by the County and a third party, whichever is earlier.

Enclosed find cash, bidder's bond, or cashier's or certified check No. Bid Bond from the Bid Bond Bank in the amount of 10% of the bid amount, which is not less than ten percent (10%) of this bid, payable to the County of Yolo as bid security and which is given as a guarantee that the undersigned will enter into a contract and provide the necessary bonds and certificates of insurance if awarded the work.

If awarded a Contract, the undersigned agrees to execute and deliver to the County within ten (10) days after date of receipt of Notice of Award, a signed Contract and the necessary Performance Bond, Payment Bond, Certificates of Insurance and Endorsements, and Tax Identification Number.

The undersigned certifies that it is licensed in accordance with the California law providing for the registration of Contractors, License No. 519488, Expiration Date 10/31/21, class of license C39/C43. If the bidder is a joint venture, each member of the joint venture must include the above information.

The following forms, which have been completed and executed by undersigned bidder, are incorporated by this reference and made a part of this proposal:

BID SCHEDULE
BIDDER'S STATEMENT OF FINANCIAL RESPONSIBILITY, TECHNICAL ABILITY,
AND EXPERIENCE
DEBARMENT AND SUSPENSION
LIST OF SUBCONTRACTORS
NONCOLLUSION DECLARATION
IRAN CONTRACTING ACT CERTIFICATION
PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION
PROPOSAL GUARANTEE

The undersigned acknowledges receipt, understanding, and full consideration of the following addenda to the Plans and Specifications:

Addenda No. #1

(Fill in addenda numbers if addenda have been received and insert, in this Proposal, any Bid Schedule sheets that were received as part of the addenda.)

[SIGNATURE AND CERTIFICATION ON THE NEXT PAGE]

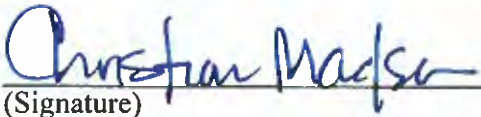
The undersigned acknowledges that the representations made herein are made under penalty of perjury under the laws of the State of California.

Bidder:

Bidder's Business Address:

Madsen Roofing & Waterproofing, Inc.
(Company Name)

5960 Bradshaw Road
Sacramento, CA 95829

By 
(Signature)

Christian Madsen
(Type or print name)

President
(Title)

Sacramento, California
(Where signed) (City, State)

(corporate seal)

Dated: August 31, 2021
State of Incorporation: California

Names of individual members of firm or names and titles of all officers of corporation and their addresses are listed below:

Name Christian Madsen Title President and CFO/Treasurer

Complete Address 5960 Bradshaw Road, Sacramento, CA 95829

Phone (916) 361-3327

Name Rosemary C.B. Reynolds Title Secretary

Complete Address 5960 Bradshaw Road, Sacramento, CA 95829

Phone (916) 361-3327 FAX (916) 361-3370

Name _____ Title _____

Complete Address _____

Phone _____

BID SCHEDULE

CONTRACT PRICE SCHEDULE

Item No.	Description	Quantity Pricing	Individual Line Item Pricing
1	BASE Proposal - Sheriff's Admin/Morgue Roof Project Bidder acknowledges and agrees that the Base Bid accounts for any and all Allowance(s), Total Cost based on Scope of Work and all bid documents	Lump Sum	\$187,939.00
2	ADD Alternate "A" – Replacing T-111 siding on Morgue Roof with 16" wide Meridian paneling	Lump Sum	\$3,750.00
3	ADD Alternate "B" – Remove and install ¾" plywood substrate. Base bid includes 200 Sq. Ft. but need amount if more is required	Sq. Ft.	\$5.00

The costs for any work shown or required in the Plans and Specifications, but not specifically identified as a line item are to be included in the related line items and no additional compensation shall be due to Contractor for the performance of the work.

The bidder shall set forth for each unit basis item of work an item price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Total" column shall be the extension of the item price bid on the basis of the estimated quantity for the item.

In case of discrepancy between the item price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

(a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;

(b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item price or item total, whichever most closely approximates percentage-wise the unit price or item total in the County's final estimate of cost.

For purposes of evaluating bids, the County will correct any apparent errors in the extension of unit prices and any apparent errors in the addition of lump sum and extended prices.

The estimated quantities for unit price items are for purposes of comparing bids only and the County makes no representation that the actual quantities of work performed will not vary from the estimates. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the unit price.

**BIDDER'S STATEMENT OF FINANCIAL RESPONSIBILITY,
TECHNICAL ABILITY, AND EXPERIENCE**

For bids in excess of seven hundred fifty thousand (\$750,000), the bidder must submit proof of participation in a State of California Division of Apprenticeship Standards approved joint labor and management apprenticeship program.

A. INFORMATION ABOUT BIDDER

(Indicate not applicable ("N/A") where appropriate.)

NOTE: Where bidder is a joint venture, pages shall be duplicated, and information provided for all parties to the joint venture.

- 1.0 Name of Bidder: Madsen Roofing & Waterproofing, Inc.
- 2.0 Type, if Entity: Corporation (California)
- 3.0 Bidder Address: 5960 Bradshaw Road, Sacramento, CA 95829

<u>(916) 361-3370</u>	<u>(916) 361-3327</u>
Facsimile Number	Telephone Number
<u>christian@madsenroof.com</u>	
Email Address	

- 4.0 How many years has Bidder's organization been in business as a Contractor?
34 Years

- 5.0 How many years has Bidder's organization been in business under its present name?
11 Years

- 5.1 Under what other or former names has Bidder's organization operated?
Madsen Roof Company, Inc.

- 6.0 If Bidder's organization is a corporation, answer the following:

- 6.1 Date of Incorporation: July 22, 1987
- 6.2 State of Incorporation: California
- 6.3 President's Name: Christian Madsen
- 6.4 Vice-President's Name(s): None

6.5 Secretary's Name: Rosemary C.B. Reynolds

6.6 Treasurer's Name: Christian Madsen

7.0 If an individual or a partnership, answer the following:

7.1 Date of Organization: N/A

7.2 Name and address of all partners (state whether general or limited partnership):

N/A

8.0 If other than a corporation or partnership, describe organization and name principals:

N/A

9.0 List other states in which Bidder's organization is legally qualified to do business.

Oregon and Nevada

10.0 What type of work does the Bidder normally perform with its own forces?

Roofing and waterproofing - all types

11.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

No

12.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

No

13.0 List Trade References:

Beacon Building Products (916) 571-9820

Cal Roof Supply (916) 439-0291

Berger Steel Corporation (916) 640-8778

ABC Supply Co. Inc. (916) 454-1031

14.0 List Bank References (Bank and Branch Address):

First Northern Bank - Sacramento Financial Center

Attn: Ken Bryant

1375 Exposition Blvd, Suite 101, Sacramento, CA 95815

(916) 246-7661

15.0 Name of Bonding Company and Name and Address of Agent:

The Ohio Casualty Insurance Company

Lodi-Alliant Insurance Services, Inc.

641 S. Ham Lane, Suite B, Lodi, CA 95242

LIST OF CURRENT PROJECTS (BACKLOG)

[**Duplicate Page if needed for listing additional current projects. **]

Project	Description of Bidder's Work	Completion Date	Cost of Bidder's Work
UC Davis	Single-Ply Roofing	2/28/2022	\$823,655
Yolo High School	BUR/Bio Restoration	11/30/2021	\$1,155,209
Auto Auction	BUR	11/30/2021	\$708,354
Auburn Library	Single-Ply/Metal	10/31/2021	\$623,962
Gonzales Building	Single-Ply Roofing	9/17/2021	\$554,000

B. LIST OF COMPLETED PROJECTS – LAST THREE YEARS

[**Duplicate Page if needed for listing additional completed projects. **]

Please include only those projects which are similar enough to demonstrate bidder’s ability to perform the required work.

Project	Description of Bidder’s Work	Completion Date	Cost of Bidder’s Work
Village Elementary School	Single-Ply Roofing	November 2019	\$788,875
Foothill High School	Single-Ply Roofing	January 2021	\$1,894,102
CSUS Library	Single-Ply Roofing	March 2021	\$469,884
El Dorado Co Multi-Site	Roof Restoration System	December 2020	\$810,822
Del Oro High School	Roof Restoration System	November 2020	\$1,712,679

**C. EXPERIENCE AND TECHNICAL QUALIFICATIONS
QUESTIONNAIRE**

The bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity. The bidder may provide a current resume for each key personnel that is fully responsive to each question below.

1. List each person's job title, name and percent of time to be allocated to this project:

Tyler Canaday / Project Manager / 33%

David Patton / Project Manager / 33%

Jesus Andres / General Superintendent / 33%

2. Summarize each person's specialized education:

Bachelor Degree

13 years of internal training

30 years of apprentice, journeyman, foreman and superintendent training

3. List each person's years of construction experience relevant to the project:

12 years

13 years

30 years

4. Summarize such experience:

Project estimating and management.

Project estimating and management.

Installation of roofing systems. Serve as project foreman. Superintend 70+ employees.

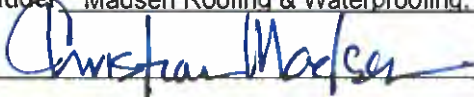
Bidder agrees that personnel named in this bid will remain on this project until completion of all relevant work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the County.

E. ADDITIONAL BIDDER'S STATEMENTS:

If the bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

None

Name of Bidder Madsen Roofing & Waterproofing, Inc.

Signature 

Name and Title Christian Madsen, President

Dated August 31, 2021

DEBARMENT AND SUSPENSION
(Public Contract Code Section 6109)

Contractor represents and warrants that it is eligible to bid and work on this project pursuant to Sections 1777.1 and 1777.7 of the California Labor Code and other applicable provisions of law. Further, Contractor acknowledges that it is prohibited from performing work on this project with a subcontractor who is ineligible to perform work on public works project pursuant to Sections 1777.1 and 1777.7.

Signature: 

Printed Name: Christian Madsen

Title: President

Firm Name: Madsen Roofing & Waterproofing, Inc.

Date: August 31, 2021

LIST OF SUBCONTRACTORS

The subcontractor listed below will perform work or labor or render service to the contractor in or about the construction of the work or improvement, or are subcontractors licensed by the State of California who will, under subcontract to the contractor, specially fabricate and install a portion of the work or improvement according to detailed drawings contained in the Contract Documents, in an amount in excess of one-half of one percent (1/2 of 1%) of the contractor's total bid. Notwithstanding the foregoing, if the work involves the construction of streets and highways, then the bidder shall list each subcontractor who will perform work or labor or render service to the bidder in or about the work in an amount in excess of one-half of one percent (0.5%) of the bidder's total bid price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

In compliance with the Subletting and Subcontracting Fair Practices Act Chapter 4 (commencing at Section 4100), Part 1, Division 2 of the California Public Contract Code, the bidder shall set forth below:

- (a) The name and the location of the place of business.
- (b) The California contractor license number.
- (c) The DIR public works contractor registration number; and
- (d) The portion of the work which will be done by each subcontractor.

If a bidder fails to specify a subcontractor or if a contractor specifies more than one subcontractor for the same portion of work, then the bidder shall be deemed to have agreed that it is fully qualified to perform that portion of work and that it shall perform that portion itself.

Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number
N/A - No Subcontractors				

Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number
N/A - No Subcontractors				

(Attach additional sheets if necessary)

Name of Bidder Madsen Roofing & Waterproofing, Inc.

Signature 

Name and Title Christian Madsen, President

Dated August 31, 2021

**NONCOLLUSION DECLARATION TO BE EXECUTED
BY BIDDER AND SUBMITTED WITH BID**
(Public Contract Code Section 7106)

State of California)
) ss.
County of Yolo)

The undersigned declares:

I am the President of Madsen Roofing & Waterproofing, Inc.,
the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. 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. All statements contained in the bid are true. 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, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on August 31, 2021 [date], at Sacramento [city], California [state].

Name of Bidder Madsen Roofing & Waterproofing, Inc.

Signature 

Name and Title Christian Madsen, President

Dated August 31, 2021

Note: Bidders are cautioned that making a false certification may subject the bidder to criminal prosecution.

IRAN CONTRACTING ACT

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

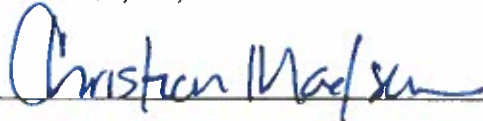
The Contractor is not:

- (1) identified on the current list of person and entities engaged in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or
- (2) a financial instruction that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

The County has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the County will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

Signature: _____



Printed Name: Christian Madsen

Title: President

Firm Name: Madsen Roofing & Waterproofing, Inc.

Date: August 31, 2021

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted, nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Bidder hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations. If the project is exempt from the contractor registration requirements pursuant to the small project exemption under Labor Code Sections 1725.5 and 1771.1, please mark "Yes" in response to "Small Project Exemption."

Name of Bidder: Madsen Roofing & Waterproofing, Inc.

DIR Registration Number: 1000000193

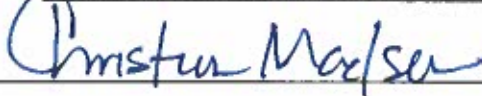
DIR Registration Expiration: June 30, 2022

Small Project Exemption: Yes or No

Unless Bidder is exempt pursuant to the small project exemption, Bidder further acknowledges:

1. Bidder shall maintain a current DIR registration for the duration of the project.
2. Bidder shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
3. Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Bidder Madsen Roofing & Waterproofing, Inc.

Signature 

Name and Title Christian Madsen, President

Dated August 31, 2021

PROPOSAL GUARANTEE

[Note: Not required when other form of bidder's security, e.g., cash, certified check or cashier's check, accompanies bid.]

The makers of this bond are, MADSEN ROOFING & WATERPROOFING, INC., as Principal, and THE OHIO CASUALTY INSURANCE COMPANY, as Surety and are held and firmly bound unto the County of Yolo, organized and operating under the laws of the State of California, hereinafter called the County, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID PRICE of the Principal submitted to the County for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying bid dated August 31, ~~21~~ 2021, for Sheriff's Admin/Morgue Roof Project.

If the Principal does not withdraw its bid within the time specified in the Contract Documents; and if the Principal is awarded the Contract and provides all documents to the County as required by the Contract Documents; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents shall affect its obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by the County and judgment is recovered, the Surety shall pay all litigation expenses incurred by the County in such suit, including reasonable attorneys' fees, court costs, expert witness fees and expenses.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this 27th day of August, 2021, the name and corporate seal of each corporation.

(Corporate Seal)

MADSEN ROOFING & WATERPROOFING, INC.

Contractor/ Principal

By Christian Madsen

Title Christian Madsen, President

THE OHIO CASUALTY INSURANCE COMPANY

Surety

By: Jennifer Loper

Attorney-in-Fact (Attach Attorney-in-Fact Certificate)

Title Jennifer Loper, Attorney-in-Fact

(Corporate Seal)

Notary 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 _____

On _____, 20____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")

appeared _____, who proved to me on the basis of satisfactory

Name(s) of Signer(s)

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.

Place Notary Seal Above Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
- Corporate Officer

Title(s)

Title or Type of Document

- Partner(s)
 - Limited
 - General

Number of Pages

- Attorney-In-Fact
- Trustee(s)
- Guardian/Conservator

Date of Document

- Other:
 - Signer is representing:
 - Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

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 San Joaquin)

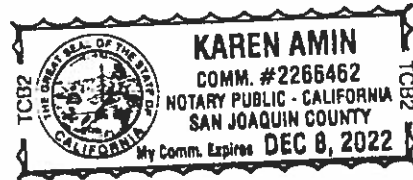
On August 27, 2021 before me, Karen Amin, Notary Public
(insert name and title of the officer)

personally appeared Jennifer Loper
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  (Seal)





This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8197947 - 969440

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Daniel M. Connolly, Karen Amin, Jennifer Loper, David Schnapp

all of the city of Lodi state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 8th day of November, 2018.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey, Assistant Secretary

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 8th day of November, 2018 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute 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 have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 27th day of August, 2021.



By: Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

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.

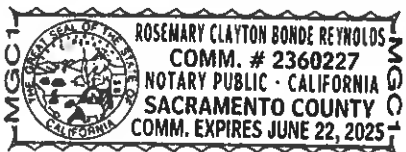
State of California)
)
County of Sacramento)

On August 30, 2021 before me, Rosemary C.B. Reynolds,
personally appeared Christian Madsen

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 Rosemary C B Reynolds
Signature of Notary Public

Place Notary Seal Above

**OPTIONAL
DESCRIPTION OF ATTACHED DOCUMENT**

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____



Project Manual

For

Roof Project County Sheriff's & Morgue Building

Issued for Bid

VOLUME 1 and 2

Bidding and Contract Requirements
Specifications and Drawings

for the

County of Yolo

625 Court Street
Woodland, CA 95695

July 28, 2021

BEAM Project No.: 20333R/20334R



Project Manual

For

Roof Project County Sheriff's & Morgue Building

Issued for Bid

for the

County of Yolo

July 28, 2021

PBK Project No.: 20333R/20334R

Consultants:

Building Envelope Consultant

BEAM Professionals, a PBK Company
Shawn LeCrone, RRC, RRO, REWO, CD, IIBEC
2520 Venture Oaks Way, Suite 440
Sacramento, CA 95833
Phone: (916) 927-4444

PROJECT MANUAL COVER SHEET AND STAMP PAGE

DOCUMENT 00 00 00 TABLE OF CONTENTS

VOLUME 1

DISTRICT DOCUMENTS

00 00 01 District Informal Bid Documents

VOLUME 2

TECHNICAL SPECIFICATIONS by BEAM Professionals

DIVISION 1 GENERAL REQUIREMENTS

01 11 00 Summary of Work

DIVISION 2 EXISTING CONDITIONS

02 41 13 Selective Demolition

DIVISION 6 WOOD, PLASTICS, AND COMPOSITES

06 10 00 Rough Carpentry

DIVISION 7 THERMAL AND MOISTURE PROTECTION

07 42 16 Metal Wall and Soffit Panels
07 54 23 Polyvinyl Chloride (PVC) Membrane Roofing System
07 63 00 Roof Related Sheet Metal
07 72 00 Roof Accessories
07 92 00 Joint Sealants

DRAWINGS by BEAM Professionals

GO GENERAL INFORMATION
G1 GENERAL INFORMATION
A1 SHERIFF'S BUILDING – ROOF PLAN
A2 MORGUE BUILDING – ROOF PLAN
A2 GENERAL ROOF DETAILS
A3 GENERAL ROOF DETAILS
A4 GENERAL ROOF DETAILS
A5 GENERAL ROOF DETAILS

END OF DOCUMENT 00 00 00

SECTION 01 11 00 SUMMARY OF WORK

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Conditions of the contract and Division 1, as applicable, apply to this Section.

1.2 SCOPE OF WORK

- A. The Project, County Sheriff's, and Morgue Buildings – 2500 East Gibson Road, Woodland, CA 95776
 - a. Base Proposal:
 - 1) Contractor to remove and properly dispose of existing roofing system down to roof deck in designated areas on roof plans approximately 200 square feet, remove all existing wall, curb flashings and existing walking pads. Remove / Replace existing roof deck in areas that show evidence of dry rot, infill area to match existing roof elevation. Clean and prep existing substrate to receive new substrate. Mechanically attach ¼" Recovery Board, fully adhere new specified 60 mil PVC roof membrane with new associated sheet metals, new receiver/removable counter flashings at base of metal parapet walls roof area A1, new coping caps, trim, and expansion joints metal. Existing electrical/gas/condensate lines are to be installed at new roof elevations on specified pipe supports if new existing line needs to be raised to properly fit new support height minimum 6" with protection pads. Contractor to remove and properly dispose of existing T-111 siding at vertical parapet walls at area B1 of the County Morgue. Install new 36" wide R paneling with non-concealed fasteners as per manufacturers specifications.
 - b. Alternate "A" Proposal : County
 - 1) Contractor to remove and properly dispose of existing T-111 siding at vertical parapet walls. Install new 16" wide meridian paneling with concealed fasteners as per manufacturers specifications.

1.3 SALVAGED MATERIALS

- A. Owner may salvage all items deemed reusable or necessary to keep from facilities to be demolished prior to the start of demolition.
- B. Contractor shall remove and turn additional items over to the Owner, as directed.
- C. Contractor shall demolish, remove and salvage all other items of demolished work.

1.4 CONTRACTS AND USE OF SITE

- A. Contractor Use of Premises:
 - 1. Confine operations at site to areas permitted by:
 - a. Law
 - b. Ordinances
 - c. Permits
 - d. Contract Documents
 - 2. Do not unreasonably encumber site with materials or equipment.
 - 3. Assume full responsibility for protection and safekeeping of products stored on

- premises.
4. Obtain and pay for use of additional storage or work areas as needed for operations.
 5. Contractor shall establish secured staging area for work and coordinate and provide for safe passage and exit from building areas during construction, as determined by City officials.
 6. Contractor shall coordinate all construction activities with Owner.
 7. Owner reserves the right to perform construction operations with its own forces or to employ separate contractors on portions of the Project. Contractor shall coordinate with this work in terms of providing site access, work space, and storage space, cooperation of work forces, scheduling, and technical requirements.
 8. Coordinate all utility shutdowns with Owner and, as required, with local utility companies, prior to commencement of shutdown.
- B. Owner Occupancy:
1. Partial Owner Occupancy: The Owner reserves the right to place and install equipment in completed areas of the building, prior to Substantial Completion provided that such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.
 2. A Certificate of Substantial Completion will be executed in accordance with conditions of the Contract.
 3. Contractor shall obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
 4. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy the Owner will provide operation and maintenance of mechanical and electrical systems in occupied portions of the building.
 5. Prior to partial Owner occupancy, emergency and life safety systems shall be fully operational. Emergency and life safety systems include, but are not limited to, fire sprinkler systems, fire alarm systems, and emergency egress devices. For emergency exiting purposes, the path of travel shall be clearly delineated and functional. If required, temporary barricades shall separate on-going construction from occupied spaces as allowed by the governing agency holding jurisdiction over the Project. Required inspections and tests shall have been successfully completed. Upon occupancy the Owner will provide operation and maintenance of emergency and life safety systems in occupied portions of the building.
- C. Owner-Furnished Items:
1. The Owner may provide items to the Contractor for installation in accordance with manufacturer's recommendations and instructions.
 2. The Owner will arrange and pay for delivery of Owner-furnished items in accordance with the Contractor's Construction Schedule, and will inspect deliveries for damage.
 3. If Owner-furnished items are damaged, defective or missing, through no fault of the Contractor, the Owner will arrange for replacement.
 4. The Contractor is responsible for designating the delivery dates of Owner-furnished items in the Contractor's Construction Schedule and for receiving, unloading and handling Owner-furnished items at the site. The Contractor is responsible for protecting Owner-furnished items from damage, including damage from exposure to elements, and to repair or replace items damaged as a result of his operations.
- D. Coordination with Owner's Forces or Owner's Contractors:
1. Provide site access, space allocation, scheduling, scheduling coordination, coordination of work forces and coordination of technical requirements with contractors that may be selected and employed by Owner to perform work simultaneously and in conjunction with the Work, which may include, but shall not be limited to the following, as applicable to the Project:

- a. Materials Inspection and Testing Agency
- b. HVAC Testing, Adjusting, Balancing Agency
- c. Energy Management System Contractor
- d. Data and Cabling System Contractor
- e. Telephone System Contractor
- f. Modular Furniture Installer
- g. Lighting and Sound
- h. Surveying

1.5 PROTECTION OF EXISTING PROPERTY

- A. Contractor shall provide and maintain adequate protection of all Owner's existing property during duration of Project.
- B. Contractor shall verify location of all existing underground pipelines on site with the owner of such pipelines and authorities having jurisdiction and shall provide and maintain adequate protection of all such pipelines during duration of Project.
- C. Protection of Trees:
 1. Provide wood barricades around trees and shrubs at their drip line in traffic areas to protect them from construction operations until Substantial Completion, or until barricade removal is directed by Architect.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Refer to Specification Sections.

PART 3 EXECUTION

3.1 CONSTRUCTION SCHEDULE

- A. The Owner has a critical need for the work to begin upon Notice to Proceed and shall have the entire work Substantially Complete by October 29, 2021

END OF SECTION 01 11 00

SECTION 02 41 13 SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Conditions of the Contract and Division 1, as applicable, apply to this Section.

1.2 SECTION INCLUDES

- A. Partial demolition of existing building as required to accommodate additions and renovations as shown on the drawings or required. Include removal of existing utilities as indicated or encountered; removal of masonry, and mechanical, electrical, and plumbing items as indicated or required.

1.3 SUBMITTALS

- A. Submit the following items.
 - 1. Itemized Demolition Schedule.
 - 2. Detail all demolition methods to be used.

1.4 PERMITS

- A. Procure and pay for all necessary permits or certificates required to complete the work specified. Make any and all required notifications and comply with all applicable Federal, State and local ordinances.

1.5 QUALITY ASSURANCE

- A. Provide at least one (1) person who shall be present and in charge of the Demolition Work at all times and who shall be thoroughly familiar with all phases of all work performed under this Section.
- B. Comply with all pertinent codes and regulations applying to this work.

1.6 JOB CONDITIONS

- A. Use all means necessary to prevent the spread of dust during performance of this work. Provide additional clean filters for the existing air handling system serving those areas to remain to protect them from construction dust.
- B. Use all means necessary to protect the existing building to remain from all types of damage, including fire, water damage, and unnecessary interruption of utility services. In the event of damage of any kind, immediately make all repairs and replacements necessary to the approval of the Owner at no additional cost to the Owner.
- C. Motor driven equipment shall have functional mufflers.
- D. Visit the site and examine the existing structure. Note all conditions as to the character and extent of work involved.

1.7 PRE-INSTALLATION CONFERENCE

- A. Notification of Architect requirements.

PART 2 PRODUCTS

2.1 GENERAL

- A. Provide all barricades, shoring, and bracing necessary to protect the tenants, workmen, and Public from danger. Barricades shall be sufficiently designed to protect and or exclude the public from all hazards.
- B. All other materials, not specifically described but required for proper completion of Work of this Section, shall be as selected by the Contractor subject to the approval of the Owner.

2.2 DEMOLITION WORK

- A. Perform demolition work in manner so as to allow Owner's safe use of existing facility.
- B. Perform demolition work in order to maintain Owner's construction schedule.

PART 3 EXECUTION

3.1 DEMOLITION

- A. Before commencing the Work of this Section, verify with the Owner that all items to be removed by the Owner have been removed. Schedule the work in a careful manner with all necessary consideration for the Public and the Owner. All items of existing equipment and materials or any other item of value to the Owner shall be salvaged by the Owner prior to demolition.
- A. All material removed under this Contract, which is not to be salvaged or reused, shall become the property of the Contractor and be promptly removed from the site. At all times use movable debris boxes, covered, to convey the material through the building. Do not store or permit debris to accumulate on the site. Dumpsters shall not overflow and shall be emptied on a regular basis. Remove all debris from the building premises and leave the construction site "Clean" each day. All debris shall be dumped in an approved disposal facility and all fees for this shall be paid by the Contractor. Contractor is responsible for completely removing all demolished materials from the site and disposing of them in accordance with all local, State and Federal Regulations. If Contractor fails to remove debris promptly, Owner reserves the right to have debris removed at Contractor's expense.
- B. Conduct operations so as not to interfere with adjacent occupied spaces, roads, streets, drives, walks, service lines and the like.
- C. Keep all pedestrian areas clear for passage at all times.

3.2 PROTECTION OF STRUCTURES, PROPERTY

- A. Execute demolition work to ensure adjacent property no damage from falling debris or other causes.
- B. Take precautions to guard against movement, settlement, or be liable for such movement, settlement, or collapse; repair promptly such damage when so ordered.
- C. Repair damage to Owner's property or any other person or persons on or off premises by reason of required work.

END OF SECTION 02 41 13

SECTION 06 10 00 ROUGH CARPENTRY

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Conditions of the Contract and Division 1, as applicable, apply to this Section.

1.2 SECTION INCLUDES

- A. All rough carpentry items including, but not limited to:
 - 1. Wood blocking for support of items supported on or recessed into wood framing or requiring wood blocking for support.
 - 2. Wood cants, nailers, curbs, and other items associated with roofing work.
 - 3. Miscellaneous framing items and plywood sheathing.

1.3 RELATED WORK

- A. All Sections of Work supported on or recessed into wood framing or requiring wood blocking for support, such as wall trim, wall cabinets, handrails, lockers, toilet compartments, toilet and bath accessories, markerboards, tackboards, projection screens, fire extinguisher cabinets, etc., as applicable to the Project.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's data on wood treatment materials.

1.5 STANDARDS AND GRADING

- A. All lumber used structurally shall be graded and marked with grade and trademark of a lumber grading organization approved by the Architect, except that a certification of grade from such a grading organization may be accepted in lieu of grade and trademarks when approved by Architect. Trademark of manufacturer shall also appear on each piece.
- B. Each piece of plywood used structurally shall carry the American Plywood Association trademark.
- C. Grading Rules: Conform with all applicable requirements of American Lumber Standards "Simplified Practice Recommendations R-16" and to grading rules of manufacturer's association under whose rules the lumber is produced.
- D. Reference Standards: Conform with all requirements.
 - 1. U.S. Dept. of Commerce Product Standards (PS)
 - 2. American Plywood Association (APA)
 - a. Standards and Construction Guide
 - 3. American Wood Preservers Association (AWPA)
 - a. Standards, as they apply.
 - 4. Architectural Woodwork Institute (AWI)
 - a. "Quality Standards"
 - 5. National Woodwork Manufacturers' Association (NWMA)
 - a. Standards
 - 6. Western Wood Products Association (WWPA)
 - a. Manual

PART 2 PRODUCTS

2.1 MATERIALS

- A. Lumber:
1. Treated No. 2, S4S Southern Yellow Pine, #1 kiln dried.
 - a. Comply with NWMA Standards
 - b. Use for blocking, stripping, grounds, cants and miscellaneous wood items in contact with concrete, roofing, or exposed to the weather.
 2. No. 2, S4S Southern Yellow Pine: Use for framing, blocking, stripping and miscellaneous concealed interior lumber not exposed to concrete, roofing weather or moisture, when FRS lumber is not required by building code.
 3. Fire Retardant No, 2, S4S Southern Pine: Refer to Fire Retardant Treatment below. Use for framing, plates and blocking in all walls and partitions where required by building code or noted on drawings.
- B. Plywood:
1. General: Comply with APA Standards.
 2. APA A-D, Group 1 Interior used where appearance of only one side is exposed to view for interior locations. Use for wall liner at MDF/IDF closets and telephone boards in mechanical and telephone rooms where shown or required. 3/4 inch thick unless required or shown otherwise. Paint as scheduled in Section 09 91 00.
 3. Exterior plywood, Group 1, APA rated sheathing. Use where miscellaneous plywood is exposed to concrete, weather, or at roof construction as sheathing.
 4. Fire Retardant Treated Plywood: Refer to Fire Retardant Treatment below. Use when required by building code or noted on drawings.
 5. Underlayment: If shown or required, APA rated Sturdi-floor, exterior grade, tongue and groove edges.
- C. Rough Hardware:
1. Nails, Spikes, and Staples: Galvanized for exterior locations, high humidity locations, and treated wood; plain finish for other interior locations: Size and type to suit application. Do not use to resist "pull-out" loads.
 2. Bolts, Nuts, Washers, Lags, and Screws: Medium carbon steel; size and type to suit application. Galvanize for exterior locations, high humidity locations, and treated wood. Plain finish for other interior locations.
 3. Fasteners: Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry and concrete. Bolts or power activated type for anchorage to steel.
- D. Wood Treatment:
1. Preservative Treatment (Concealed Conditions):
 - a. Micronized Copper Quaternary (MCQ): Pressure impregnate preservative to net retention of 0.25 lbs./cu.ft., in plant licensed by manufacturer in accordance with the following standards:
 - 1) Preservative Treatment Standard: AWPA P5
 - 2) Structural Lumber Treatment Standard: AWPA C31
 - 3) Plywood Treatment Standard: AWPA C9
 - b. Brush two (2) coats of preservative on bored or sawn surfaces of treated lumber.
 - c. Provide Quality Mark Stamp on treated wood for identification.
 - d. Fasteners: Metal fasteners in contact with preservative treated wood shall be G-90 galvanized, minimum, or stainless steel in accordance with manufacturer's instructions. No uncoated steel shall come in contact with preservative wood.
 - e. ACQ and CCA preservatives not permitted.
 - f. Acceptable Manufacturers: Osmose "MicroPro" Smart Sense; or Architect approved equal.

2. Fire Retardant Treatment:
 - a. Lumber shall be pressure-impregnated with non-combustible fire retardant chemicals in accordance with U.L. FRS Fire Hazard Classification. All lumber must be dried following treatment in accordance with AWPAs Standard C20.
 - b. Plywood shall be pressure-impregnated with non-combustible fire retardant chemicals in accordance with U.L. FRS Fire Hazard Classification. All plywood must be dried following treatment in accordance with AWPAs Standards C27.

PART 3 EXECUTION

- A. Wood Framing:
 1. Framing and blocking shall be accurately cut and fitted true to line and levels, avoiding shims and wedges.
 2. Spiking and nailing shall be done using largest size spikes and nail practicable.
 3. Unless otherwise shown, use 2 inch by 4 inch wood studs spaced 16 inches o.c. with 4 inch face perpendicular to direction of wall or partition. Provide single bottom plate and double-top plates 2 inches thick by width of studs.
 4. Bolt nailers and blocking to steel, masonry or concrete members with bolts or proportionate strength of members attached from each end, except as otherwise noted on plans.
 5. Provide blocking, bucks and framing as necessary and for other trades as required.
 6. Drill lumber accurately for bolts and fit all bolts with suitable washers.
 7. Perimeter wood blocking to be attached 2'-0" staggered with 1/2" galvanized bolts through both nailers.
 8. Screws are to be used for perimeter edge nailers. No nailing permitted.
- B. Plywood:
 1. Install plywood over framing in accordance with instruction of American Plywood Association Construction Guide Form No. E30C.
 - a. Install underlayment plywood as shown in accordance with instructions of American Plywood Association. Space panel joints and edges 1/32 inch. Fill and sand panel edge joints, surface roughness, and damaged or open areas. Nail with 4d ring-shank nails spaced at six (6) inches at edges and eight (8) inches in field each way.

END OF SECTION 06 10 00

SECTION 07 42 16 METAL WALL AND SOFFIT PANELS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 RELATED SECTIONS

- A. Section 07 54 23 – Fully Adhered Thermoplastic Membrane Roofing System
- B. Section 07 63 00 – Roof Related Sheet Metal
- C. Section 07 92 00 - Joint Sealants

1.3 DELIVERY AND STORAGE

- A. All panels shall be delivered with appropriate packaging to provide protection against transportation damage. Materials damaged in shipping or storage shall not be used.
- B. Store all materials and accessories above ground on well-skidded platforms. Store under waterproof covering. Provide proper ventilation to panels to prevent condensation build-up between panels.

1.4 COORDINATION

- A. Coordinate work with installation of associated metal flashings and manufactured roof panels.

1.5 WARRANTY

- A. Provide a five (5) year contractors workmanship and water tightness warranty.
- B. Provide a manufacturer's twenty (20) year finish warranty.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Wall Siding Panels: 24 ga. galvanized metal
- B. Style:
 - 1. PBR - Major longitudinal ribs 1 ¼ inches (32 mm) deep, spaced 12 inch (305 mm) on center; minor longitudinal ribs centered between major ribs, spaced 4 inch (102 mm) on center panel. Panel size 36 inch cover width, exposed fastening.
 - 2. MSR - Major longitudinal rib 1 ½ inch (38 mm) deep with male seam 2.97 inch (75.43 mm) deep and female seam 3 inch (76.19 mm) deep at longitudinal panel edges. Panel size 16 inch cover width, concealed fastening.

- C. Finish: Factory-prefinished with an exterior surface of Kynar 500® or Hylar 500® based coating having a resin content consisting of at least 70 percent PVDF fluoropolymer resin content, in at least 1.0 mil thickness, in color(s) as selected by Owner; interior surface finish, manufacturer's standard.
- D. Soffit Panels: Vented thickness as recommended by Manufacturer of wall panels. Manufacturer shall be the same as wall panel manufacturer.
- E. Accessories:
 - 1. Polyisocyanurate Insulation: Shall comply with NFPA 285 and ASTM E2357 and E331. Thickness shall be 2 inches.
 - 2. Zee Girts: 16 gauge minimum thickness galvanized steel, 2 inch rise minimum, or as required to align with existing conditions.
 - 3. Sub-Girt Fasteners: Stainless Steel screws to meet application.
 - 4. Concealed Fasteners: Stainless Steel screws supplied or recommended by panel manufacturer to suit application.
 - 5. Metal Trim at Siding Panels: 24 ga. galvanized metal matching finish type and color of siding panels.
 - 6. Closures: 24 ga. galvanized metal pre-finished mill finish, matching finish type and color of siding panels.
 - 7. Separate dissimilar metals with asphalt-saturated building felt or a bituminous coating to prevent galvanic action.
 - 8. Air Barrier: Utilize high temperature product compatible with air barrier chosen from the fluid applied air barrier system specification.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine metal frame to insure it is prepared to receive siding.
- B. Ensure substrates are flat, free from objectionable warp, wave and buckle

3.2 INSTALLATION OF SIDING PANELS

- A. Install zee-girts at maximum 24 inches on center (vertical max.) to satisfy local building code, at least three per panel length. Fasten girts to wall with two fasteners at 18 inches on center max.
- B. Comply with manufacturer's instructions for assembly, installation and erection in order to achieve weathertight installation.
- C. Install waterproof membrane behind zee-girts for unvented panels only. Seal all laps.
- D. Fasten siding panels along each zee-girt.
- E. Install closures and trim to form a complete installation.
- F. Install sheet metal flashings according to provisions of Section 07 63 00.

3.3 PROTECTION

- A. Protect roofing and siding from damage and discoloration.
- B. Repair damaged or discolored panels.

END OF SECTION 07 42 16

SECTION 07 54 23 – POLYVINYL CHLORIDE (PVC) MEMBRANE ROOFING SYSTEM

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Providing the entire roofing assembly, including, but not limited to:
 - 1. Wood nailers (Refer to this Section and Section 06 10 00)
 - 2. Fully adhered thermoplastic single-ply membrane roofing
 - 3. Flashings, including sheet metal perimeter edge (fascia) (Refer this Section and Section 07 63 00)
 - 4. Walkway pads, expansion joints, and other work incidental to, the complete and proper installation of a watertight roofing system as shown on the drawings or specified herein, and in accordance with all applicable requirements of the Contract Documents.
- B. It is the intent of this Section that the Work shall:
 - 1. Provide a watertight facility.
 - 2. Conform to all applicable building code requirements and of authorities having jurisdiction.
 - 3. Include Section 07 63 00, as part of the Work of this Section; and be performed by a single source contractor.

1.3 RELATED WORK

- A. All Sections of Work relating to the roofing system, including mechanical, plumbing and electrical items penetrating the roof system.

1.4 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. A 385, Practice for Providing High-Quality Zinc Coatings (Hot-Dip)
 - 2. D 471, Resistance to water absorption
 - 3. D 751, Method of Testing Coated Fabrics
 - 4. D 1149 Ozone resistance
 - 5. D 1204 Linear Dimensional Change
 - 6. D 2137 Brittleness point, max,
 - 7. D 4637/6878(annex A1) Thickness over scrim
 - 8. E 96 Water vapor permeance, Perms
 - 9. E 903 Solar Reflectance (albedo X 100), %
 - 10. G 151/154 Accelerated weathering
 - 11. FTM 101C method 2031 Puncture resistance
- B. ASCE-7 Wind uplifts requirements for geographical area.
- C. National Roofing Contractors Association (NRCA)
 - 1. Roofing and Waterproofing Manual (Latest Edition)
- D. Single Ply Roofing Institute (SPRI)

- E. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA)
 - 1. Architectural Sheet Metal Manual (Latest Edition)
- F. Underwriters' Laboratories (UL)
 - 1. Fire Hazard Classifications
- G. 2019 California Building Code (CBC)

1.5 PERFORMANCE REQUIREMENTS

- A. General Requirements: Provide an installed thermoplastic single ply roofing system, flashing and related work that is watertight and will not permit the passage of liquid water, able to withstand wind loads, thermally induced movement and exposure to weather without failure.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing system manufacturer based on testing and field experience.
- C. Roofing System Design: Comply with ANSI/SPRI "Wind Design Standard Practice for Roofing Assemblies" for the following ground roughness exposure and system design:
 - 1. Check for geographical exposure (i.e. Exposure B: City, suburban areas, towns and wooded terrain.)
 - 2. Fully Adhered thermoplastic single-ply membrane roofing.
- D. Underwriter's Laboratories Inc. (UL)
 - 1. UL RMSD – Current Roofing Materials and Systems Directory
 - 2. UL Fire Resistance of Roofing Coverings Materials
- E. Exterior Fire Exposure Classification: Class A, ASTM E 108, for application and slopes shown.
- F. American Architectural Manufacturer's Association (AAMA)
- G. Occupational Safety and Health Administration (OSHA)
- H. 2019 California Building Code (CBC)

1.6 SUBMITTALS

- A. Product Data: Manufacturer's printed instructions, tested assemblies, schedules, charts, literature, and illustrations to indicate the performance, fabrication procedures, product variations, adhesive, and accessories to be used in the Work.
- B. Certifications:
 - 1. Manufacturer's written certification that installer is approved and licensed to install specified roofing system. **(Submit a copy with Proposal Form)**
 - 2. Manufacturer's affidavits that materials used in Project contain no asbestos.
 - 3. Installer shall submit resume and project experience list for proposed system for Project Manager and job site superintendent.
 - 4. Installer shall submit written certification that there are no undocumented workers being employed by them or any subcontractor on this project and that covers all workers on this project by workmen's compensation.
 - 5. Installer shall submit list of all subcontractors with evidence of subcontractor's insurance coverage in compliance with contract requirements.

6. Manufacturer's written certification of approval / acceptance of these specifications and details.
- C. Referenced Standards: Two (2) copies of each referenced standard and retain approved copies at site.
- D. Shop Drawings: Furnish from copies of the Manufacturer's literature or from copies of NRCA "Roofing and Waterproofing Manual", (Latest Edition).
 1. Furnish for approval any proposed details, which differ from those, included with this proposal package. All proposed details shall first be approved in writing by roofing manufacturers prior to submitting to Roof Consultant for approval.
 2. Furnish detail project sequencing, staging, material loading, manpower plans, and project construction schedule for approval.
- E. Samples:
 1. Furnish copy of sample warranty that is to be issued upon project completion.
 2. Furnish samples of roof membrane.
 3. Furnish sample of metal edge to be installed.
- F. Upon Substantial Completion of Work, submit the following to Roof Consultant for his submission to Owner:
 1. Manufacturer's Warranty: Manufacturer's written warranty as specified.
 2. Contractor's Warranty: Contractor's written warranty as specified.
 3. Maintenance Procedures: Three (3) copies of Manufacturer's printed instructions for Owner's use regarding care and maintenance of roof.
 4. Affidavits of non-asbestos for material.
 5. Affidavits from material manufacturers, suppliers and sub-contractors for release of liens.
 6. Refer to Section 01 17 83 for additional requirements of close-out documents.

1.7 INSPECTIONS / TESTS

- A. The Roof Consultant's and Manufacturer's representative shall at all times have access to the job site and work areas. The contractor will provide proper and safe facilities for such access and inspection.
 1. Roof Consultant Observations: The Roof Consultant will be providing periodic inspections throughout the duration of the project. Roof Consultant's Representative shall be required to inspect after completion of each major phase of construction for approval.
 2. Manufacturer Inspections:
 - a. An inspection shall be made by a representative of the material manufacturer **three (3) times a month** during performance of Work to ensure that said project is installed in accordance with the Manufacturer's specifications and illustrated details. Written reports by the manufacturer shall be turned over to the Roof Consultant, on each Monday following the prior week.
 - b. The authorized material Manufacturer's field representative shall be responsible for:
 - 1) Keeping the Roof Consultant's representative informed after periodic inspections as to the progress and quality of the work observed.
 - 2) Calling to the attention of the contractor those matters observed which are considered to be in violation of the contract requirements.
 - 3) Reporting to the Roof Consultant's representative, in writing, any failure or refusal of the contractor to correct unacceptable practices called to his attention.
 - 4) Confirming, after completion of the work and based on his observation and test, that he has observed no application procedures in conflict with

these specifications.

- B. Any failure by the Roof Consultant's or Manufacturer's Representative to detect, pinpoint, or object to any defect or noncompliance of these specifications of work in progress or completed work shall not relieve the contractor, or reduce, or in any way limit, his responsibility of full performance of work required of him under these specifications.
- C. Roof Consultant may require tests and inspections as necessary to verify quality of roofing materials and workmanship. Laboratory tests will be performed in accordance with ASTM standard procedures.
 - 1. Owner will select testing laboratory and will pay for Work required by testing laboratory.
 - 2. Re-tests for work which fail initial tests or inspections shall be paid by contractor.
 - 3. **Non compliance with contractor requirements will result in the Roof Consultant / Owner to assign full time quality control and will be subject to reimbursement by the construction manager/contractor.**

1.8 QUALITY ASSURANCE

- A. Installer:
 - 1. Installer shall have approval by manufacturer of accepted roofing system for application and issuance of specified warranty for a minimum of three (3) years. Proof of license agreement dated at least three years prior to date of bid opening.
 - 2. Installer shall be an experienced single firm specializing in the type of roofing and sheet metal work specified, with a minimum of five (5) years of previous successful experience on projects similar in size and scope.
 - 3. Installer shall be certified and approved by manufacturer and licensed to install specified roofing system.
 - 4. No subcontracting of sheet metal fabrication or installation will be accepted. Installer must have a sheet metal shop on the company premises.
 - 5. Installers shall have a competent Superintendent, who is not actually performing roofing work, on site at all time while work is in progress, with full authority to act on behalf of the Installer as his agent.
 - 6. All workmen shall be covered by Workmen's Compensation insurance (verify upon request) and thoroughly experienced in the particular class of work upon which employed. Use of undocumented workers will not be tolerated - No Exceptions.
 - 7. Installer shall ensure that base fastener pull out resistance tests on existing decks were performed and approved by Roof Consultant and coordinated with Roofing Consultant prior to starting roofing application.
 - 8. Roofing installer must have reached the highest level of qualifications from the Manufacturer they are providing material for (i.e. Master Select installer).
- B. Regulatory Requirements:
 - 1. Classification by Underwriters' Laboratories, Inc. as a Class A roof covering.
 - 2. Roofing system shall be installed in accordance with ASCE-7 wind uplift requirements as indicated by SEOR (if applicable) for geographical location exposure C, 115 MPH 3-second gust wind speed zone and risk category III. Wind-resistance loads listed below have a safety factor of 2.0 incorporated in the calculation.
 - a. Zone 1 Field – 38.6psf
 - b. Zone 2 Perimeter (Within 8'-0" of perimeter edge) – 64.6psf
 - c. Zone 3 Corner (Within 8'x8' of corner edges) – 97.4psf
 - 3. Follow local, state, and federal regulations of safety standards and codes. Refer to applicable building code for roofing system installation requirements and limitations.
- C. Laboratory Testing and Samples:
 - 1. Roof Consultant may require tests and inspections as necessary to verify quality of roofing materials and workmanship. Laboratory tests will be performed in accordance

- with ASTM procedures.
 2. Owner will select testing laboratory and will pay for Work required by testing laboratory. Installer shall assume all costs for extraction and patch of all samples.
 3. Re-tests for work which fail initial tests or installer shall pay inspections.
 4. Installer shall correct all deficiencies in accordance with manufacturers recommended procedures at no cost to Owner.
- D. Installation:
1. Unless otherwise indicated, the materials to be used in this specification are those specified and denote the type, quality, performance, etc. required. All proposals shall be based upon the use of the specified material.
 2. Install materials in accordance with the manufacturer's current published application procedures and the general recommendations of the National Roofing Installer's Association.
 3. It will be the installer's responsibility to obtain and/or verify any necessary dimensions by visiting the job site, and the installer shall be responsible for the correctness of it. Any drawings supplied are for reference only.
 4. Installer shall plan and conduct the operations of the work so that each section started on one day is complete, details installed and thoroughly protected and in watertight condition before the close of work for that day.
 5. Materials will be securely fastened in place in a watertight, neat and workmanlike manner. All workmen shall be thoroughly experienced in the particular class of work upon which employed. Work shall be performed in accordance with these specifications and shall meet the approval in the field of the Roof Consultant.
 6. All waste materials, rubbish, etc., shall be removed from the Owner's premises as accumulated. Rubbish shall be carefully handled to reduce the spread of dust, and shall be deposited at an approved disposal site. At completion, all work areas shall be left broom clean and all installers' equipment and materials removed from the site.

1.9 PRE-INSTALLATION CONFERENCE

- A. Refer to Section 01 13 11 – Project Coordination.

1.10 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in Manufacturer's original unopened packaging with all tags and labels intact and legible. Carton and can labels, shall indicate appropriate warnings, storage conditions, lot numbers, and usage instructions. Handle and store materials and equipment in such a manner as to avoid damage. The proper storage of materials is the sole responsibility of the contractor. Materials damaged in shipping or storage shall not be used. Wet or damaged roofing materials shall be discarded, removed from job site, and replaced with new materials prior to application.
- B. Manufacturer's packaging and / or roll plastic is not acceptable for exterior storage. Tarpaulin with grommets shall be accepted minimum for exterior coverings. All materials stored, as above shall be minimum of four (4) inches off the substrate, and the tarpaulin tied off with rope.
- C. Products liable to degrade as a result of being frozen shall be maintained above 40° F in heated storage.
- D. Moisture sensitive products shall be maintained in dry storage areas or properly covered. Roofing insulation and felts must always be covered or stored in a dry area when not being used.

- E. No storage of materials shall be permitted on roof areas other than those materials that are to be installed the same day. Any exception must be in written form. Do not place materials or equipment in such a manner as to overload structure.

1.11 WARRANTY

- A. Roofing Manufacturer: Warrant the roofing and associated Work for 20 years from date of Substantial Completion as follows:
 - 1. The warranty shall be a No Dollar Limit (NDL) / no penal sum type, with total replacement cost.
 - 2. The warranty shall guarantee the entire roof system and associated work against defective materials and workmanship of installation, with NO exclusion for ponding water.
 - 3. The roof system including roofing insulation, flashing, penetrations, wall flashings, metal work, labor, and material shall be guaranteed against failure of workmanship and materials. Repair of the system, including materials and labor, shall be done at no cost to the Owner.
 - 4. Submit four (4) original executed copies of the Warranty / Guarantee.
- B. Roofing Installer: Jointly with any sub installers employed by him, shall guarantee the work required and performed under this contract will be free from defects in workmanship and materials, and that the building will be and remain waterproof for a five (5) year warranty period, after the Roof Consultant accepts the work as substantially complete. The warranty shall be in approved notarized written form, to obligate the Installer, and sub installers, to make good the requirements of the warranty.
- C. Make arrangements with the materials manufacturer to provide the required warranty. Final warranty shall be submitted to Owner at time of Substantial Completion.
- D. Submit attached Installer's Warranty and Sub installer's Guarantee forms at Project Closeout.

PART 2 PRODUCTS

2.1 GENERAL

- A. The components of the roof system are intended to be products of a single manufacturer as required providing the specified system warranty. Products not manufactured by the Roofing Manufacturer, but are required in the roofing assembly, will be recognized by the Roofing Manufacturer and covered under the Manufacturer's warranty.
- B. Install all materials in accordance with Manufacturer's current written specifications, details and instructions. Deviations shall not be made without prior written approval from the Manufacturer and the Owner's Representative. Should any specifications or details conflict with the Contract Documents, submit to Owner the recommended alternative that provides the best long term moisture protection and complies with Manufacturer's warranty requirements for approval.

2.2 ROUGH CARPENTRY

- A. All nailers, cants and wooden curbs shall be No. 2 or better treated lumber selected to meet design details and field dimensions and requirements of Section 06 10 00, Rough Carpentry. MCQ and MCA only.

2.3 ROOFING SHEET METAL

- A. Refer to Section 07 63 00, Roof Related Sheet Metal.

2.4 APPROVED MANUFACTURERS

- A. Unless noted otherwise, specifications are based on products of manufacturers listed below. Manufacturers whose products meet or exceed the specifications, who have manufactured and installed roof materials and systems of the type specified for a minimum of ten (10) years, and who maintains a single source responsibility for the total roofing system, as described herein, may apply for approval as a substitution in accordance with Division 01 requirements regarding substitutions. The following approved manufacturers:
 - 1. Sika Sarnafil, Canton, MA; (800) 451-2504
 - 2. Carlisle, Inc., Carlisle, PA; (800) 479-6832
 - 3. Soprema, Wadsworth, OH; (800) 356-3521
- B. All materials shall be manufactured, specified, or accepted in writing by membrane manufacturer issuing the warranty. Proposed materials shall ensure full system warranty from said manufacturer. Installer shall be an installer licensed by the manufacturer.
- C. Samples of all materials used on the project, which are not supplied by the membrane manufacturer, shall be submitted to the membrane manufacturer for written approval prior to starting work.
- D. All materials used on the project shall be asbestos free.

2.5 ROOF MEMBRANE ASSEMBLY

- A. Polyvinyl Chloride Sheet: Uniform, flexible sheet formed from polyvinyl chloride, complying with ASTM D 4434, of the following type, thickness, and exposed face color:
 - 1. Classification Type III, polyester-reinforced Thermoplastic.
 - 2. Thermoplastic Polymer Thickness: Overall Min. 60 mils; Over Scrim Min. 27 mils
 - 3. FM Approved
 - 4. UL Class A.
 - 5. Exposed Face Color: White
 - 6. 3-Year SRI, 74 minimum.
- B. Approved Material:
 - 1. Sarnafil Product: Sarnafil G 410-60 EnergySmart
 - 2. Carlisle Product: Sure-Flex PVC 60-mil Min
 - 3. Soprema Product: Sentinel G200 60-mil

2.6 ROOF INSULATION

- A. All insulation shall be approved in writing by the membrane manufacturer as to thickness, type, and manufacturer. All insulation must be approved for the specific application, with UL and FM approval.
- B. Polyisocyanurate Roof Insulation: Shall comply with ASTM C1289 Type II, Class 1, Grade 2 (20 psi minimum compressive strength). Insulation shall be surfaced on both sides with a non-asphaltic non-organic coated fiberglass facers. Thickness shall be a minimum 3.5" over all conditioned air space, see drawings for details.
 - 1. Approved product:
 - a. Sarnafil Product: SarnaTherm CG-20psi
 - b. Carlisle Product: InsulBase PolyISO
 - c. Soprema Product: Sopra-ISO

- C. Recover Board: Glass-Faced Gypsum Roof Board equal to UL rated Type X "Dens Deck Prime" as produced by Georgia-Pacific. Board sizes shall be 48" x 96" x 1/4" or as indicated on drawings for roof assembly. Provide as required by manufacture recommendation primer for Roof System. Approved substitute, SECUROCK by USG.
- D. Tapered Polyisocyanurate Insulation: Shall comply with ASTM C1289 Type II, Class 1, Grade 2 (20 psi minimum compressive strength) Insulation shall be surfaced on both sides with a non-asphaltic non-organic coated fiberglass facers. Board sizes shall be 48"x48" sloped/cut to 1/4 inch per foot slope or as indicated on drawings for roof assembly.
 - 1. Approved product:
 - a. Sarnafil Product: SarnaTherm CG-20psi
 - b. Carlisle Product: InsulBase PolyISO
 - c. Soprema Product: Sopra-ISO
- E. Tapered Edge Strip: 1-1/2 inches to 0 inches, 18 inches x 48 inches, install at all roof drains, expansion joints, curbs, projections, crickets, saddles and base flashings. Approved material shall be as manufactured by Cant Products or pre-approved equal.

2.7 ACCESSORIES

- A. General: Furnish auxiliary materials recommended by Roofing System Manufacturer for intended use and compatible with membrane roofing materials.
 - 1. Furnish liquid-type auxiliary materials that meet VOC limits of authorities having jurisdictions.
- B. Flashing and Flashing Accessories: As recommended by the Thermoplastic sheet Manufacturer's printed instructions for reinforced sheet flashing of same material, type, thickness, and color as sheet membrane.
- C. Fasteners: FM Approved corrosion resistant steel screws of the appropriate size for fasteners for roof membrane and insulation attachment and for sheet metal flashing. Fasteners for the membrane shall be supplied by the Thermoplastic Manufacturer and are to be installed as recommended by Thermoplastic Sheet Manufacturer's printed instructions.
 - 1. Shall be Factory Mutual approved and supplied by the manufacturer for the specific application.
 - 2. Fastener for Brick: Shall be 1/4 inch x 2 inches, stainless steel nail, one piece unit, flat head, as manufactured by Rawl Zamac Nailin, or approved equal.
 - 3. Nails: G-90 galvanized or non-ferrous type, size as required to suit application, minimum 11 gauge with 3/8 inch diameter head.
- D. Bonding Adhesive: As recommended by Thermoplastic Sheet Manufacturer's printed instructions to develop a bond between the membrane and the substrate to which the membrane is to be attached. Sarnacol Bonding Adhesive or approved substitute.
- E. Metal Termination Bars: Manufacturer's standard aluminum bars, approximately 1-inch (25-mm) wide, roll formed and pre-punched.
- F. Metal Flashings, Copings, Edge Trim and Accessories: Provide all roofing Manufacturer's metal required for a complete roofing system covered under the Manufacturer's warranty.
- G. Sealants: Membrane Manufacturer's approved sealant shall be used to seal penetrations through the membrane system and at miscellaneous sealant applications that come in contact with roof systems components.
- H. Liquid Applied Flashings: Two-component polymethyl methacrylate-based (PMMA) material by Roofing Manufacturer. Include in 20 Year NDL warranty.

- I. Walkpads / Protection Pads: Provide a polyester reinforced, weldable membrane with embossment similar to a chevron pattern.
 - 1. Provide walk pads shall be installed at point of roof access to each service points of all roof mounted equipment requiring periodic maintenance.
 - 2. Protection pads shall have rounded corners and extend minimum four (4) inches beyond edge of overlying element.
 - 3. Provide new protection pads under all pipe supports, at HVAC and mechanical access points, in front of all roof top doors and openings.
- J. Miscellaneous Accessories: Provide pourable sealants, performed cone and vent sheet flashings, pre-formed inside and outside corner sheet flashings, T-joint covers, termination reglets, and other accessories as recommended by Roof System Manufacturer for intended use.
- K. Other miscellaneous materials shall be of the best grade available and approved in writing by Roof System Manufacturer, prior to use, for the specific application.

PART 3 EXECUTION

3.1 PROJECT CONDITIONS

- A. Existing Conditions: Examine existing building and new construction to determine existing physical conditions that affect installation of new roofing.
- B. Weather Limitations: Proceed with roofing work only when existing and forecasted weather conditions permit roofing to be installed according to Manufacturer's written instructions and warranty requirements.
- C. Environmental Requirements:
 - 1. Apply roofing in dry weather.
 - 2. Do not expose roof components and flashing in inclement weather or when it is predicted 30% or more possibility for inclement weather.
 - 3. When ambient temperature is below 40 degrees Fahrenheit, expose only enough sensitive cements, sealants, and adhesives as required for use within a four-hour period.
 - 4. Do not expose membrane and accessories to a constant temperature of 180 degrees Fahrenheit.
- D. Protection:
 - 1. Provide special protection and avoid traffic on completed areas of membrane installation.
 - 2. Restore to original condition or replace work or materials damaged during handling of roof materials.
 - 3. Take precautions as required to protect adjacent work and structures.
- E. Emergency Equipment: Maintain on site equipment necessary to apply emergency temporary edge seal in event of sudden storms or inclement weather.
- F. Restrictions:
 - 1. Comply with General Requirements on use of site.
 - 2. Smoking is prohibited on all roof areas or in existing buildings.
 - 3. Maintain facility and all utility services in a functional condition.
 - 4. Provide sanitary facilities for employees.

3.2 EXAMINATION

- A. Examine and verify that receiving substrate surfaces of the structure have no defects or errors, which would result in poor or potentially defective application or cause latent defects in workmanship.
 - 1. Examine substrate to which roofing material is to be applied to ensure that its condition is satisfactory for roofing application. Do not permit voids greater than 1/4 inch wide in the substrate. Substrates for roofing materials shall be dry and free of oil, dirt, grease, sharp edges, and debris. Inspect substrates, and correct defects before application of thermoplastic sheets.
- B. Verify that roofing openings and penetrations are in place and set and braced and that roof drains are properly clamped into position.
- C. Do not proceed with installation until unsatisfactory conditions have been corrected. Starting installation shall imply acceptance of surfaces and conditions.

3.3 NAILERS

- A. Wooden nailers shall be installed at perimeter edges or drip edges on outside perimeter of building, to match elevation of new roof insulation and recovery board thickness.
- B. All Construction: Nailers shall be the same height as the new insulation and recovery board being installed or to existing raised roof edge whichever is applicable. Nailers shall be anchored to resist a pullout force of 300 pounds per linear foot per Factory Mutual Data Sheet 1-49. Fasteners shall be no less than two (2) per nailer, and be spaced at two (2) feet on center maximum. Provide nailers at all penetrations. Raise all curbs, flashing, etc, a minimum of eight (8) inches above the finished surface.

3.4 SUBSTRATE PREPARATION

- A. Substrate Surface: Prepare substrate surfaces to insure proper and adequate installation, in strict accordance with the Contract Documents and approved Shop Drawings, or Manufacturer's requirements.
- B. Fill all gaps and voids between substrate components that are wider than 1/4 inch. Fill all gaps with same materials as the substrate.
- C. The Membrane Manufacturer shall specify types of substrates that are suitable for use with the bonding adhesive.
- D. Protection of Adjacent Areas or Surfaces: Protect adjacent areas or surfaces from damage as a result of the Work of this section. Remove sharp projections.
- E. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.
- F. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of the roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.
- G. Tear-off :
 - 1. Tear-off existing roof system down to existing lightweight concrete deck, deck to remain. Remove all associated Flashings and abandoned equipment.
 - 2. Repair / Patch all existing decks as required, due to removal of equipment or

- deteriorated conditions.
3. Sweep or vacuum all surfaces, removing all loose aggregate and foreign substances prior to commencement of roofing. Ensure dry, smooth surface with no depressions or ponding water. Notify Roof Consultant prior to roofing any areas that may result in ponding water.
 4. Trash Chutes: Roofing materials and other discarded materials shall be put into an enclosed trash chute. No material may be thrown off roof. Remove debris daily from roof and from grounds.
 5. Refer to phasing plans for flashing of existing curbs now and demolition of existing curbs and penetrations at future dates, flashing of new curbs and penetrations at a future date.

3.5 APPLICATION OF INSULATION

- A. General: (As required per roof area)
 1. Manufacturer's Instructions: In regard to attachment, the Manufacturer's instructions or specifications shall determine the suitability for an application.
 2. Fastener pull out test will be required for verification of condition of the concrete decking and suitability of Manufacturer's metal fasteners
 3. Precautions: The surface of the insulation must not be ruptured due to overdriving of fasteners. The surface of the insulation or substrate shall be inspected prior to installation of the thermoplastic roof membrane. The substrate shall be clean, dry and smooth with no excessive surface roughness, contaminated surfaces or unsound surfaces such as broken, delaminated, or damaged insulation boards. Any wet, broken, delaminated, or damaged insulation shall be replaced with new insulation.
 4. Thermal insulation boards shall be laid between metal panel ribs, with overall thickness a minimum of $\frac{3}{4}$ " taller than rib. All joints shall be tight and at the roof perimeter and roof penetrations, insulation shall be cut neatly and fitted to reduce openings to a minimum. All openings 1/4 inch or larger shall be filled with insulation.
 5. No more insulation shall be installed than can be covered by the completed roof system by the end of the day or the onset of inclement weather.
 6. Tapered insulation and crickets, when specified, shall be placed in accordance with the drawings and / or as required NRCA standards.
- B. Specified polyisocyanurate recovery board shall be fully adhered to concrete deck meeting Factory Mutual recommendations for wind uplift as dictated by wind zone applicable to location of project.

3.6 INSTALLATION OF PVC MEMBRANE

- A. General: Install in strict accordance with manufacturer's latest published requirements, instructions, specifications, and details and approved shop drawings.
- B. Over the properly installed and prepared substrate, manufacturer's adhesive shall be poured out of the pail and spread using notched $\frac{1}{4}$ " X $\frac{1}{4}$ " X $\frac{1}{4}$ " rubber squeegees. The adhesive shall be applied at a rate according to manufacturer's requirements. No adhesive is applied to the back of the fleece-backed membrane. ***Do not allow adhesive to skin over or surface-dry prior to installation of fleece-backed membrane.***
- C. The roof membrane is unrolled immediately into the wet adhesive. Adjacent rolls overlap previous rolls by 3 inches. This process is repeated throughout the roof area. Immediately after application into the adhesive, each roll shall be firmly pressed into place with water filled, foam covered lawn roller by frequent rolling in two directions. ***Do not allow adhesive to skin over or surface dry prior to installation of fleece-backed membrane.***

- D. Weld cover strips at all seams that do not have a factory selvage edge.

3.7 SEAM INSTALLATION

- A. Clean seam areas, overlap sheets, and weld side and end laps of sheets and flashings according to Manufacturer's written instructions to ensure a watertight seam installation. Weld seam as follows:
 - 1. Weld Method: Hot Air
- B. Test lap edges with probe to verify seam weld continuity on a daily basis. Perform pull-tests of welded lap seam samples daily and install T-joint patches at all t-joint intersections of membrane and flashing seams.
- C. Repair tears, voids, and lapped seams in roofing that does not meet requirements.

3.8 FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrate according to roofing system Manufacturer's written instructions.
- B. Apply bonding adhesive to substrate and underside of flashing sheet at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with sheet flashing as recommended by Manufacturer.
- D. Clean seam areas, overlap seams, and firmly roll flashings into the adhesive. Weld side and end laps to ensure a watertight seam installation.
- E. Test lap edges with probe to verify seam weld continuity. Apply lap sealant, if required by roofing manufacturer, and seal exposed edges of sheet flashing terminations per Manufacturer's requirements.
- F. Terminate and seal top sheet flashings and mechanically anchor to substrate through termination bars.

3.9 METAL FLASHINGS, COPINGS, EDGE TRIM AND ACCESSORIES INSTALLATION

- A. General: Secure metal flashings accessories at roof edges according to FM Loss Prevention Data Sheet 1-49 for specified wind zone.

3.10 QUALITY CONTROL

- A. Roofing Installer: On-site evaluation welded seams shall be made by the Contractor to locations as directed by the Owner's representative or PVC Manufacturer's technical representative. Two-inch wide cross-section samples shall be taken three times a day minimum through completed seams. Correct welds shall display failure from shearing of the membrane prior to separation of weld. The Contractor at no extra charge to the Owner shall patch each test cut. Test seam samples shall be label with location of seam cut, date of seam cut, and retain for Owner's representative or PVC Manufacturer's technical representative for test cut inspection.
- B. Manufacturer's Quality Control Inspection: The Manufacturer's Technical Representative shall review the on-going work on a minimum of three times every 30 calendar days. All defects noted non-compliance with the Contract Documents or the recommendations of the

Thermoplastic Manufacturer should be itemized in a punch list. These items must be corrected immediately by the Contractor to the satisfaction of the Owner's Representative and the thermoplastic manufacturer.

3.11 PROTECTING AND CLEANING

- A. Protect sheet membrane roofing from damage and wear during remainder of construction period.
- B. Immediately remove all spots, smears, stains, residues, adhesives, etc., from the Work of this Section and / or upon adjacent areas or surfaces, which result from the Work of this Section.
- C. Upon completion of the Work of this Section, dispose of, away from the Site, all debris, trash, containers, residue, roofing remnants and scraps which results from the Work of this Section.
- D. Correct deficiencies in or remove roofing that does not comply with requirements, repair substrates, reinstall roofing, and repair sheet flashings to a condition free of damage and deterioration at the time of Substantial Completion and according to warranty requirements.
- E. Overnight Seal / Water Cut-Off:
 - 1. Over Night Seal: Shall be performed according to accepted roofing practice as outlined in the NRCA Roofing Manual.
 - 2. Water Cut-Off: At the end of day's work or when precipitation is imminent, construct a water cut-off at all open edges. Cut-offs can be built using asphalt or plastic cement and roofing felts, constructed to withstand protracted periods of service. Cut-offs must be completely removed prior to resumption of roofing.

3.12 ACCEPTANCE

- A. Prior to demobilization from the site, the Owner / Project Manager, Roof Consultant and Installer shall review the work. All defects noted noncompliance with the Contract Document or the recommendations of the PVC Manufacturer should be itemized in a punch list. These items must be corrected immediately by the Contractor prior to demobilization to the satisfaction of the Owner / Project Manager, and the PVC Manufacturer.
- B. Notify Roof Consultant and Owner 48 hours in advance of the date and time of inspection.
- C. All warranties as required for the project of this specification shall be submitted for approval prior to final payment.

END OF SECTION 07 54 23

SECTION 07 63 00 ROOF RELATED SHEET METAL

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. Conditions of the Contract and Division 1, as applicable to this

1.2 SECTION INCLUDES

- A. It is the intent of this Section that the Work shall:
 - 1. Conform to all applicable building code requirements and of authorities having jurisdiction.
 - 2. Include all shop and field formed sheet metal work shown on drawings, specified or required, including, but not limited to:
 - a. Roof penetration sleeves and hood and umbrella counterflashing
 - b. Metal counterflashing
 - c. Expansion joint
 - d. Roof drains
 - e. Scuppers
 - f. Metal perimeter edge
 - g. Gutters, Downspouts, Splash Blocks and Splash Pans
 - h. One-way roof moisture relief vents
 - i. Metal gravity vents
 - j. Metal heat exhaust vents
 - k. Sanitary vent pipes
 - l. Pipe box
 - m. Copings, trim and miscellaneous sheet metal accessories.
 - 3. Be part of the Work of Section 07 51 23, PVC Membrane Roofing System; and be performed by a roof membrane contractor.

1.3 RELATED WORK

- A. Section 07 54 23 - PVC Membrane Roofing System
- B. Section 07 72 00 - Roof Accessories
- C. All Sections of Work relating to or affecting the roofing system, including mechanical, plumbing and electrical items.

1.4 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. A525, Specification for General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process
 - 2. A526, Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality
 - 3. A527, Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Lock-Forming Quality
 - 4. A167, Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
 - 5. B32, Specification for Solder Metal
 - 6. C1107, Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)

- B. Factory Mutual (FM)
 - 1. Loss Prevention Data Sheets: I-49, Perimeter Flashing
- C. Federal Specifications (FS)
 - 1. QQ-L-201
- D. National Association of Architectural Metal Manufacturers (NAAMM)
- E. E. National Roofing Contractors Association (NRCA)
 - 1. Roofing and Waterproofing Manual
- F. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA)
 - 1. Architectural Sheet Metal Manual
- G. ANSI / SPRI ES-1: Fabricate and install sheet metal edge flashings and copings to comply with requirements of ANSI/SPRI ES-1 for 90 MPH wind speed zone and wind resistance loads.

1.5 SUBMITTALS

- A. Product Data:
 - 1. Manufacturer's specifications and other data needed to prove compliance with specified requirements.
 - 2. Manufacturer's installation instructions.
- B. Shop Drawings: Indicating sizes, configurations, details of attachment to related and adjacent work, materials, and finishes.
- C. Samples:
 - 1. Full range of finish colors for Architect's selection.
 - 2. 12 inch long sample of each specified item with approved finish.
 - 3. Provide full size mockup of all shop built assemblies.

1.6 QUALITY ASSURANCE

- A. Single Source Responsibility: Fabricator and installer of roof-related flashing and accessories shall be the same as the membrane roof installer.
- B. Comply with governing codes and regulations of authorities having jurisdiction.
- C. ANSI / SPRI ES-1: Fabricate and install sheet metal edge flashings and copings to comply with requirements of ANSI/SPRI ES-1 for 90 MPH wind speed zone and wind resistance loads.

1.7 INSTALLATION CONFERENCE

- A. Refer to Section 01 31 13, Project Coordination.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver, handle and store materials in accordance with manufacturer's instructions.
- B. Handle and store materials and equipment in such a manner as to avoid damage.
- C. No storage of materials shall be permitted on roof areas other than those materials that are

to be installed the same day. Any exception must be in written form. Do not place materials or equipment in such a manner as to overload structure.

1.9 WARRANTIES

- A. Manufacturer's Product Warranty:
 - 1. Manufacturer's standard 20 year Kynar 500 or Hylar 5000 Finish warranty signed by the manufacturer, guaranteeing covering failure of the fluoropolymer finish during the warranty period.
 - 2. Failure is defined to include, but not be limited to:
 - a. Deterioration of finish, such as fading, discoloring, peeling, cracking, corroding, etc.
 - b. Leaking water within building or construction.
 - 3. Correction may include repair or replacement of failed product.
- B. Roofing Contractor's Warranty:
 - 1. Contractor shall warrant the sheet metal work and related work to be free from defects in workmanship and materials, and that the metal flashings will be and remain watertight, for a period of five (5) years from date of Substantial Completion.
 - 2. Defects shall include, but not be limited to:
 - a. Leaking water or bitumen within building or construction.
 - b. Becoming loose from substrate.
 - c. Loose or missing parts.
 - d. Finish failure as defined above.

PART 2 PRODUCTS

2.1 APPROVED MANUFACTURERS

- A. Manufacturers named within specification are approved for use on the Project providing:
 - 1. their products meet or exceed the specifications;
 - 2. company has a minimum of five (5) years experience manufacturing products of the type specified;
 - 3. products have been tested in conjunction with roofing membrane system as an assembly and as such has obtained the same approval and rating as the roofing membrane system; and
 - 4. products are approved for use by the roofing membrane manufacturer.
- B. Substitutions shall be in accordance with Division 1 requirements regarding substitutions.

2.2 SHEET METAL MATERIALS

- A. General Requirements: Roofing sheet metal system shall have been tested in conjunction with roofing membrane system as an assembly and have the same approval and rating as the roofing membrane system.
- B. Prefinished Metal Sheet:
 - 1. Precoated type, galvalume metal conforming to Fed. Spec. QQ-A-250, ASTM B209.
 - 2. Finish: Kynar 500, color as selected by Architect from manufacturer's standard colors.
 - 3. Thickness: Minimum 24 gauge, except as otherwise indicated.
- C. Membrane Clad Galvalume Sheet Steel:
 - 1. Commercial quality with 0.20 percent copper, conforming to ASTM A526, except ASTM A527 for lock forming, with G-90 hot-dip galvanized coating designation.
 - 2. Thickness: Except as otherwise indicated, minimum 24 gauge. SMACNA recommendations shall govern.

3. Finish: PVC coating as per Membrane Manufacturer's requirements.
- D. Stainless Steel: ASTM A167, Type 302/304 Soft Temper, No. 2D finish. Minimum thickness 24 gauge, except as otherwise noted.

2.3 FASTENERS

- A. Same metal as flashing/sheet metal or other non-corrosive metal or as noted below.
- B. Exposed fasteners shall be self-sealing and gasketed for weathertight installation. (ZAC type)
- C. Match finish of exposed heads with material being fastened.
- D. Mechanical Fasteners:
 1. Nails: Stainless Steel Ring shank, minimum 1-1/2 inches in length with 1/2 inch diameter head.
 2. Washers: Steel washers with bonded rubber sealing gasket.
 3. Screws: Self-tapping sheet metal type of stainless steel or compatible with material being fastened, with integral EPDM washers.
 4. Rivets: Stainless steel and cadmium plated material, closed end type of sizes recommended by sheet metal manufacturer to suit application.
- E. Clips:
 1. Continuous Cleat (coping/fascia): Minimum 22 gauge, G-90 galvanized finish. 050 aluminum or stainless steel. Match material of coping/fascia and provide one (1) gauge heavier.

2.4 RELATED MATERIALS

- A. Solder: ASTM B32, alloy grade 58, 50 percent tin, 50 percent lead.
- B. Flux:
 1. Phosphoric acid type, manufacturer's standard.
 - a. For Use with Steel or Copper: Rosin flux
 - b. For Use with Stainless Steel: Acid-chloride type flux, except use rosin flux over tinned surfaces.
- C. Underlayment:
 1. Underlayment shall be min.40 mil thick fully adhered TAMKO TW-40 or approved equal; provide primers, adhesives and accessories as recommended by manufacturer to suite the application.
- D. Adhesives: Type recommended by flashing sheet manufacturer seaming and adhesive application of flashing sheet to ensure adhesion and watertightness.
- E. Metal Accessories: Sheet metal clips, straps, anchoring devices, clamps and similar accessories required for the complete installation of work, matching or compatible with material being installed, non-corrosive, size and gauge recommended by installer to suit application and performance.
- F. Sealant:
 1. Type A:
 - a. Type: One-part, non-sag, moisture-curing polyurethane sealant.
 - b. Approved Products / Manufacturers: "Chem-Calk 900" manufactured by Bostik

Construction Products Division, "Vulkem 921" manufactured by Mameco International, Inc., "Dynatrol I" manufactured by Pecora Corporation, "NP 1" manufactured by Sonneborn Building Products, or approved equal.

2. Type B:
 - a. Type: One-part, neutral-curing, medium-modulus silicone sealant for sealing metal to metal surfaces, i.e. metal edge, cover plates, etc.
 - b. Approved Products / Manufacturers: "Chem-Calk 1200" manufactured by Bostik Construction Products Division, "795 Silicone Building Sealant" manufactured by Dow Corning Corporation, "895 Silicone" manufactured by Pecora Corporation, "Omniseal" manufactured by Sonneborn Building Products, "Spectrem 2" manufactured by Tremco Incorporated, or approved equal.
- G. Termination Bar:
 1. Material: Extruded aluminum bar with lip profile.
 2. Size: 0.090 inch thick by 3/4 inch wide with 3/16 inch lip width and a 45 degree lip angle, factory punched 1/4 inch x 3/8 inch oval holes spaced six (6) inches on center.
 3. Approved Product/Manufacturer: "LIPTB 06" manufactured by Olympic Manufacturing Group, Inc., or approved equal.
- H. Pipe Hangers and Supports: Refer to Section 07721, Roof Accessories.
- I. Splash Blocks: Concrete type, of size and profiles indicated; minimum 3,000 psi compressive strength at 28 days, with minimum five (5) percent air entrainment. Use at locations where roof drainage dumps on ground.
- J. Splash Pans: 0.040 pre finished aluminum, of size and profiles indicated. Use at locations where roof drainage discharges onto lower roof.

2.5 FABRICATION

- A. Except as otherwise indicated, fabricate work in accordance with SMACNA Architectural Sheet Metal Manual and other recognized industry practices and reviewed shop drawings. Form all flashings, receivers and counterflashings in accordance with standards set forth in the NRCA roofing manual and SMACNA.
- B. Comply with manufacturer's installation instructions and recommendations.
- C. Unless noted otherwise, fabricate gutters, downspouts, copings, and trim from pre-finished galvalume sheet.
- D. Shop fabricate work to greatest extent possible. Fabricate inside and outside corners for metal edges, counterflashing, and coping caps.
- E. Fabricate items to size and dimensions as indicated on the drawings. Limit single-piece lengths to ten (10) feet.
- F. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work sufficient to permanently prevent leakage, damage or deterioration of the work.
- G. Integrate flashing in a manner consistent with detailing. Form work to fit substrates.
- H. Make angle bends and folds for interlocking metal with full regard for expansion and contraction to avoid buckling or fullness in metal after installation.

- I. Fabricate items with straight lines, sharp angles, smooth curves, and true levels. Avoid tool marks, buckling, and oil canning.
- J. Fold back edges on concealed side of exposed edge to form hem.
- K. Unless noted otherwise, lap joints minimum three (3) inch. Lap joints to have sealant installed as per details, to maintain watertight condition, inside and outside corners and elevation changes to be riveted and soldered.
- L. Seams:
 - 1. Wherever possible, fabricate non-moving seams in sheet metal with flat-lock seams and end joints.
 - 2. Pre-finished Steel Metal: Seal pre-finished metal seams with rivets and silicone sealant.
 - 3. Metal Other than Aluminum: Tin edges to be seamed, form seams, and solder.
- M. On Kynar 500 or Hylar 5000 pre-finished metal, surface sand metal flanges prior to applying any primers. Prime all metal in contact with bituminous material.
- N. Backpaint all concealed metal surfaces with bituminous paint where expected to be in contact with cementitious materials or dissimilar metals.
- O. Expansion Provisions: Where lapped or bayonet type expansion provisions in work cannot be used or would not be sufficiently waterproof or weatherproof, form expansion joints of intermeshing hooked flanges, not less than one (1) inch deep filled with mastic sealant concealed within joints.

2.6 FABRICATED ITEMS

- A. Metal Flashings:
 - 1. Through wall Receiver: Minimum 24 gauge stainless steel, through wall receivers shall not extend past the face of the exterior veneer more than $\frac{3}{4}$ ".
 - 2. Counterflashing: Minimum 24 gauge galvanized prefinished steel where visible from ground. Unless otherwise shown on drawings, use 24 gauge stainless steel.
- B. Wind Clips: Minimum 24 gauge galvanized prefinished steel to match material of counterflashing, one (1) inch wide by length to engage counterflashing a minimum of 1/2 inch. To be installed at all wall flashings and at curb flashing lengths longer than 5 feet.
- C. Roof Penetrations:
 - 1. Umbrella Counterflashing: Two-piece construction of minimum, 24 gauge galvanized prefinished steel fabricated in accordance with drawings or project requirements.
 - 2. Pitch Pans:
 - a. 24 ga. membrane clad galvanized metal.
 - b. Fabricate to provide installed minimum clear inside perimeter dimension of two (2) inches on each side of penetrating element.
 - c. Fabricate pans to at least six (6) inches above the finished roof membrane and with 1/4 inch hem at top edge and with four (4) inch flanges. Round all corners of flange.
 - d. Fabricate metal bonnets for all pans, NO EXCEPTIONS. Fabricate bonnets with metal compatible with metal to which bonnet is to be attached. On beams and other steel, weld in place bonnets fabricated from 1/4 inch steel plate. Draw band bonnets fabricated from 24 gauge stainless steel may be used on circular projections.

- D. Metal Edge:
 - 1. Minimum 24 gauge membrane clad galvanized metal formed in maximum ten (10) foot lengths, with six (6) inch wide cover plates of same profile, four (4) inch flange, maximum seven (7) inch fascia, including a 3/4 inch gravel stop.
 - 2. Provide expansion slip joints at maximum 20 feet on center.
 - 3. Shop fabricate all interior and exterior corners. Fabricate exterior corners with 18 inch minimum to four (4) foot maximum legs. Lap, rivet, and seal prior to delivery to jobsite.
 - 4. Fabricate to sizes and dimensions as indicated on drawings with a minimum one (1) inch coverage past top of wall. Refer to SMACNA Fig. 2-5A.
 - 5. Provide mock-up for Architect's approval prior to fabrication.
- E. Vent Hoods, Sleeves, Penetration Flashings, and Accessories: Minimum 24 gauge stainless steel, or as shown or directed otherwise.
- F. Angle Termination Bar: One (1) inch x one (1) inch 24 gauge galvanized steel.
- G. Gutters, Downspouts and Collector Heads:
 - 1. Gutters and Downspouts: 0.040 gauge pre-finished aluminum metal. Match existing size. Minimum five (5) inch x six (6) inch box gutter (verify size meets rainfall data per SMACNA).
 - 2. Gutter Straps: 0.050 gauge pre-finished aluminum metal. (Hem both sides)
 - 3. Gutter Supports: 0.040 gauge pre-finished aluminum metal. Hemmed around 1/8 inch galvanized bent steel bracket.
 - 4. Gutter Screen: Stainless steel wire screen enclosed in a stainless steel frame.
 - 5. Collector Head: 0.040 gauge pre-finished aluminum metal.
- H. Pipe Box Cover: 0.040 gauge pre-finished aluminum metal
- I. Heat Exhaust Curbs and Hoods: 22 gauge stainless steel.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify substrates are smooth and clean to extent required to perform sheet metal work.
- B. Verify roof openings, curbs, pipes, sleeves, ducts or vents through roof are solidly set in place.
- C. Verify that reglets, nailers, cants, and blocking to receive sheet metal are in place and free of concrete and soil.
- D. Do not start work until conditions are satisfactory.

3.2 PREPARATION

- A. Field measure site conditions prior to fabrication work.
- B. Install starter and edge strips and cleats before starting installation.

3.3 INSTALLATION

- A. Install sheet metal with lines, arises, and angles sharp and true, and plane surfaces free from objectionable wave, warp, or buckle. Exposed edges of sheet metal shall be folded back to form 1/4 inch hem on concealed side from view. Finished work shall be free from

water retention and leakage under all weather conditions. Pre-fabricated corners or transitions are required at changes in direction, elevation, or plane and at intersections. Locate field joints not less than 12 inches, nor more than three (3) feet from actual corner. Laps shall be one (1) inch, riveted and soldered at following locations:

1. Pre-fabricated corners;
 2. transitions;
 3. changes in direction, elevation, and plane; and
 4. at intersections.
- B. Anchor units of work securely in place to prevent damage or distortion from wind or buckling. Provide for thermal expansion of metal units; conceal fasteners wherever possible; and set units true to line and level as indicated. Install work with laps, joints, and seams which are permanently watertight and weatherproof.
- C. Install fabricated sheet metal items in accordance with manufacturer's installation instructions and recommendations and with SMACNA Architectural Sheet Metal Manual.
- D. Separations: Provide for separation of metal from dissimilar metal or corrosive substrates by coating concealed surfaces with zinc chromate, bituminous coating, or other permanent separation at locations of contact as recommended by manufacturer or fabricator. Do not use materials which are incompatible with roofing system.
- E. Continuous Cleat: At exposed edges of perimeter edge, fascias, cap flashings, and where required, attach continuous cleat at six (6) inches on center with appropriate fasteners. At a distance of 10 feet from each direction of all corners, install fasteners spaced at 3 inches on center. Install cleat so fascia extends a minimum of 1 inch below top of exterior wall finish.
- F. Gravel Guard / Fascia:
1. Install with expansion joints 10 feet o.c., 1/2 inch expansion leeway, with cover plate.
 2. Fasten into nailer at 3 inches o.c. staggered.
 3. Buff sand Kynar surface of flange and prime.
 4. Strip in flange with specified stripping plies extending 6 inches from the outer edge of the flange and butt base of gravel stop.
- G. Counterflashing:
1. Do not use surface mount counterflashing.
 2. Set in through wall with receiver and spring lock counterflashing, as detailed in drawings and to NRCA roofing manual, SMACNA standards.
 3. Coordinate installation of through-wall flashing with the masonry contractor.
 4. Seal through-wall in conjunction with masonry wall waterproofing.
 5. Install wind clips 30 inches o.c. at all counterflashing over five (5) feet in length.
- H. Gutters, Downspouts and Collector Heads:
1. Install gutters, downspouts and collector heads in accordance with details and to standards set forth in the NRCA and SMACNA Manuals.

3.4 CLEANING AND PROTECTION

- A. Remove flux and residual acid immediately by neutralizing with baking soda and washing with clean water. Leave work clean of stains.
- B. Remove scraps and debris and leave work area clean.
- C. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration of finishes. Paint areas where finish is damaged on pre-finished metal by

painting with a compatible paint in color to match undamaged finish.

- D. Prime soldered area of phosphatized metal after cleaning to prevent rusting.
- E. Paint metal flashings that have been soiled with bitumen with aluminized paint.
- F. Clean other work damaged or soiled by Work of this Section.
- G. Protect finished work from damage.

END OF SECTION 07 63 00

SECTION 07 72 00 ROOF ACCESSORIES

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and Conditions of Contract, including General and Supplementary Conditions and Division 1 Administration Sections, apply to this Division.

1.2 INSTALLATION RESPONSIBILITY

- A. In addition to the items normally a part of this Section, coordinate the installation of roof accessory curbs and pipe flashing and equipment supports that may be specified elsewhere.
- B. Coordinate the work specified herein with the following Work:
 - 1. Roofing
 - 2. Roofing sheet metal
 - 3. Mechanical equipment
 - 4. Plumbing

1.3 SUBMITTALS

- A. Product Data: For each type of roof accessory indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: Show fabrication and installation details for roof accessories. Show layouts of roof accessories including plans and elevations. Indicate dimensions, weights, loadings, required clearances, method of field assembly, and components. Include plans, elevations, sections, details, and attachments to other work.
- C. Coordination Drawings: Roof plans, drawn to scale, and coordinating penetrations and roof-mounted items. Show the following:
 - 1. Size and location of roof accessories specified in this Section.
 - 2. Method of attaching roof accessories to roof or building structure.
 - 3. Other roof-mounted items including mechanical and electrical equipment, ductwork, piping, and conduit.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Pack, handle, and ship roof accessories properly labeled in heavy-duty packaging to prevent damage.

1.5 WARRANTY

- A. Warranty the Work specified herein for one (1) year against becoming unserviceable or causing an objectionable appearance resulting from either defective or nonconforming materials and workmanship.
- B. Defects shall include, but not be limited to, the following:
 - 1. Noticeable deterioration of finish
 - 2. Leakage of water into the building or within the construction.
- C. Rooftop supports – 5 year limited warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Specifications are based on products of named manufacturers. Other manufacturers must have a minimum of five (5) years experience manufacturing products meeting or exceeding the specifications and comply with Division 1 requirements regarding substitutions to be considered.

2.2 PREFABRICATED ROOF CURBS

- A. Frames:
 - 1. Material: ASTM A 653 G90 hot-dipped galvanized steel.
 - a. Minimum 18 gauge, and as engineered by manufacturer.
 - b. Minimum 18 gauge for curbs supporting HVAC units
 - c. Minimum 20 gauge for expansion joint curbs.
 - 2. Corners: Mitered and welded (welds are micro sealed and prime painted after fabrication). Bolted connections not accepted.
 - 3. Base Plates: Integral to frame and welded.
 - 4. Internally reinforced with galvanized 1 inch by 1 inch by 12 gauge angles for curbs exceeding 3 foot length. Reinforce internal bulkhead at equipment curbs to support lateral loads.
 - 5. Wood Nailers: Factory installed, pressure treated. Size and width as suitable for support of items installed on curbs.
- B. Insulation: Factory installed 1-1/2 inch thick three-pound density fiberglass insulation.
- C. Curb Height: Minimum 8 inch above finished roof.
- D. Construct curbs to match roof slope with plumb and level top surface for mounting mechanical equipment.
- E. Gasketing: 1/4 inch thick, one (1) inch wide at roof top units.
- F. Counterflashing: 24 gauge stainless steel
- G. Counterflashing Cap: Stainless steel.
- H. Cants:
 - 1. Non-canted curb style installs either under or on top of metal decks with insulation.
 - 2. Cants shall be provided under Section 07 52 19 - Roofing
- I. All insulated roof curbs shall be structural and shall include calculations signed and sealed by a registered Structural Engineer. Refer to installation drawings for any additional structural requirements. If curbs do not span a minimum of two bar joists, only two angles will be required. Coordination mechanical equipment weight loading on the roof with Structural Engineer.
- J. Approved Manufacturers:
 - 1. Custom Curb, Inc.
 - 2. Roof Products, Inc.

2.3 PIPE SUPPORTS

- A. Gas Pipe Supports:
1. Lines less than 3" OD: (non penetrating)
 - a. Provide strut and hanger type support with recycled plastics and carbon black for UV protection bases (10 inches x 16 inches x 3 inches; 6 lbs. each); Model Type 10-RAH-8 with strut, roller hanger and hold down clips for lines 2-1/2 inches and smaller
 2. Lines 3" OD or larger: (non penetrating)
 - a. Provide strut and hanger type support with recycled plastics and carbon black for UV protection bases (18 inches x 16 inches x 3 inches; 10 inches x 16 inches x 3 inches; minimum 6 lbs. each); Model Type Model 8H-CP (Miro) with hanger and roller chair
 3. Approved Manufacture:
 - a. Miro Industries, Inc.
 - b. Portable Pipe Hanger, Inc.
 - c. MAPA Products
 - d. Architectural approved equal
- B. Electrical Conduit / Condensate Lines:
1. Lines less than 3" OD: (non penetrating)
 - a. Provide strut type support with recycled plastics and carbon black for UV protection bases (10 inches x 16 inches x 3 inches; 6 lbs. each), Model Type 16-Base Strut-8
 2. Lines 3" OD or larger: (non penetrating)
 - a. Provide strut and hanger type support with recycled plastics and carbon black for UV protection bases (18 inches x 16 inches x 3 inches; 10 inches x 16 inches x 3 inches; minimum 6 lbs. each); Model Type Model 8H-CP (Miro) with hanger
 3. Approved Manufacture:
 - a. Miro Industries, Inc.
 - b. Portable Pipe Hanger, Inc.
 - c. MAPA Products
 - d. Architectural approved equal
- C. Chill Water Lines/Freon line sets:
1. Lines less than 3" OD: (non penetrating)
 - a. Provide strut and hanger type support with recycled plastics and carbon black for UV protection bases (10 inches x 16 inches x 3 inches; 6 lbs. each); Model Type 10-RAH-8 with strut, roller hanger and hold down clips for lines 2-1/2 inches and smaller,
 2. Lines 3" OD or larger: (non penetrating)
 - a. Provide strut and hanger type support with recycled plastics and carbon black for UV protection bases (18 inches x 16 inches x 3 inches; 10 inches x 16 inches x 3 inches; minimum 6 lbs. each); Model Type Model 8H-CP (Miro) with hanger and roller chair
 3. Approved Manufacture:
 - a. Miro Industries, Inc.
 - b. Portable Pipe Hanger, Inc.
 - c. MAPA Products
 - d. Architectural approved equal

2.4 SEISMIC SUPPORT CURB

- A. Equipment / Gas lines / Electrical Conduit / Condensate Lines / Etc. positive connection to structure. Unistrut welded to two (2) 10 gauge bent plates equally spaced across 4x6 wood

blocking/support curb. Plates set on neoprene isolation pad over galvanized metal cap of flashed into roof system as detailed on drawings and similar to outline of equipment support curb of NRCA guidelines.

2.5 ROOF TO ROOF EXPANSION JOINT

- A. Stainless Steel expansion joint covers on new wood curbs, as detailed on drawings and outlined the NRCA and SMACNA manual.

2.6 RETROFIT ROOF DRAINS

- A. Retrofit Roof Drains: "Hercules RetroDrain" as manufactured by OMG, Inc. or Architect approved equal.
 - 1. Size: To match existing roof drain sizes.
 - 2. Compliance:
 - a. ANSI / SPRI RD-1.
 - b. ULC / ORD-C790.4.
 - 3. Drain Body:
 - a. Material: 1-piece, 11-gauge (0.125-inch) spun aluminum.
 - b. Flange: 17-1/2-inch diameter.
 - 4. Drain Stem Length: 12 inches
 - 5. Flange Includes: Six 2-1/2-inch-long aluminum studs.
 - 6. Sump Area: Depressed.
- B. Strainer Dome:
 - 1. Material: Cast aluminum.
 - 2. Height: 7.25 inches.
 - 3. Outside Base Diameter: 9.77 inches.
- C. Clamping Ring:
 - 1. Material: Cast aluminum.
 - 2. Gravel Stop Height: 1.2 inches.
 - 3. Drainage Slots: 18 V-shaped.
 - 4. Bosses: 6, to accept studs on flange.
- D. Backflow Seal:
 - 1. Compression Seal: Watertight, "U-Flow" mechanical seal.
 - 2. Material: Polyamide and EPDM rubber.
 - 3. Required for Activation: "U-Flow" screwdriver.
- E. Hardware:
 - 1. Locknuts: 6, stainless steel, for studs.
 - 2. Screws: 3, stainless steel, to attach strainer to clamping ring.
- F. Overflows:
 - 1. At overflow locations; provide overflow collar extension
 - 2. Constructed of pvc clad aluminum

PART 3 EXECUTION

3.1 INSTALLATION

- A. Seismic Support Curbs: Install support line for positive connection to structure of each (new and existing) gas line, electrical conduit, condensate line, mechanical ductwork, freon line sets, etc running across new roof system.

1. Spacing: Shall not exceed twenty (20) feet on center. Curb not to exceed twelve (12) inches from any change in direction or elevation. Along with any additional locations indicated on drawings.
 2. Piping containing liquid to be supported on roller accessories similar to specified for gasoline pipe support. Install hold down clips or guides to ensure piping to stay in contact with roller support or Unistrut.
- B. Non-Penetrating pipe supports: Install roof accessory in accordance with manufacturer's printed instructions and approved shop drawings.
1. Spacing not to exceed six (6) feet on center between seismic support curbs. With in twelve (12) inches from any change in direction or elevation not support by seismic curb.
 2. Provide roof manufacture protection pad below each support, tacked in place with approved mastic or adhesive.
 3. Install hold down clips or guides to ensure piping to stay in contact with roller support or Unistrut.

3.2 CLEANING

- A. Clean exposed surfaces according to manufacturer's written instructions.

END OF SECTION 07 72 00

SECTION 07 92 00 – JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes: Requirements including but not limited to:
 - 1. Control and expansion joints on exposed exterior surfaces.
 - 2. Perimeter joints between wall surfaces and frames of exterior doors and openings.
 - 3. Joints indicated or as necessary.
 - 4. Accessories necessary for a complete installation.

1.3 SUBMITTALS

- A. Product Data: Technical data for each joint sealant product. Submit written certification from manufacturers of sealants attesting products are suitable for use indicated, verified through in house testing laboratory.
 - 1. Written certification from manufacturers of joint sealants attesting that products comply with specification requirements and suitable for use indicated verified through manufacturers testing laboratory within the past 36 months or since most recent reformulation, whichever is most recent.
 - a. Complete instructions for handling, storage, mixing, priming, installation, curing and protection of each type of sealant.
 - b. Manufacturer's letter, clearly indicating proposed lot numbers of each sealant supplied and expiration date sequence.
 - c. Instructions for handling, storage, mixing, priming, installation, curing, and protection of each type of sealant.
 - 2. Recycled Content:
 - a. Indicate recycled content; indicate percentage of preconsumer and postconsumer recycled content per unit of product.
 - b. Indicate relative dollar value of recycled content product to total dollar value of product included in project.
 - c. If recycled content product is part of an assembly, indicate the percentage of recycled content product in the assembly by weight.
 - d. If recycled content product is part of an assembly, indicate relative dollar value of recycled content product to total dollar value of assembly.
 - 3. Local/Regional Materials:
 - a. Sourcing location(s): Indicate location of extraction, harvesting, and recovery; indicate distance between extraction, harvesting, and recovery and the project site.
 - b. Manufacturing location(s): Indicate location of manufacturing facility; indicate distance between manufacturing facility and the project site.
 - c. Product Value: Indicate dollar value of product containing local/regional materials; include materials cost only.
 - d. Product Component(s) Value: Where product components are sourced or manufactured in separate locations, provide location information for each component. Indicate the percentage by weight of each component per unit of product.
 - 4. VOC Data: Submit manufacturer's product data for sealants. Indicate VOC limits of the product. Submit MSDS highlighting VOC limits.

5. Submit environmental data in accordance with Table 1 of ASTM E2129 for products provided under work of this Section.

B. Certificates and Reports:

1. Product Certificates: Manufacturer's product certificate for each kind of joint sealant and accessory.
2. Sealant, Waterproofing, and Restoration Institute (SWRI) Validation Certificate: For each sealant specified to be validated by SWRI's Sealant Validation Program.
3. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that sealants comply with requirements.
4. Preconstruction Compatibility and Adhesion Test Reports: From sealant manufacturer, indicating the following:
 - a. Materials forming joint substrates and sealant backings have been tested for compatibility and adhesion with sealants.
 - b. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.
5. Preconstruction Field Adhesion Test Reports: Indicate which sealants and joint preparation methods resulted in optimum adhesion to joint substrates based on testing specified.
6. Field Adhesion Test Reports: For each sealant application tested.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Firm having minimum 5 years documented experience and specializes in the installation of sealants.
 1. Exposed sealant work (sealants used for air and weatherseals external to curtain wall systems at perimeter, metal panel to panel joints) shall be performed by a single (i.e. one) firm specializing in the installation of sealants who has successfully produced work comparable to project.
 2. Concealed sealant work (sealants which are internal to metal framed curtain wall systems, skylights, and providing an air seal) shall be the responsibility of the subcontractor providing erection of the respective system.
- B. Source Limitations: Obtain each type of joint sealant from a single manufacturer.
- C. Product Testing: Test joint sealants using a qualified testing agency.
 1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.
 2. Test according to SWRI Sealant Validation Program for compliance with requirements specified by reference to ASTM C 920 for adhesion and cohesion under cyclic movement, adhesion in peel, and indentation hardness.
- D. Environmental Requirements:
 1. Toxicity/IEQ: Comply with applicable regulations regarding toxic and hazardous materials.
 - a. VOC Content of Sealants: Sealants and sealant primers complying with limits for VOC content for SCAQMD when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
 - 1) Sealants: 250 g/L.
 - 2) Sealant Primers for Nonporous Substrates: 250 g/L.
 - 3) Sealant Primers for Porous Substrates: 775 g/L.
 - b. Sealants containing aromatic solvents, fibrous talc, formaldehyde, halogenated solvents, mercury, lead, cadmium, chromium and their compounds, are not permitted.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration date, pot life, curing time, and mixing instructions for multicomponent materials.
- B. Store and handle materials in compliance with manufacturer written instructions to prevent deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 40 degrees F (4.4 degrees C).
 - 2. When joint substrates are wet. Should joints or backing materials become wet, remove and replace backing material with new.
- B. Joint Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than those allowed by joint sealant manufacturer for applications indicated.
- C. Joint Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with adhesion are removed from joint substrates.

1.7 WARRANTY

- A. Installer's Warranty: Written warranty, signed by Installer agreeing to repair or replace elastomeric joint sealant work which has failed to provide a weathertight system within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.
- B. Warranties: Written warranties (weatherseal and stain resistance), signed by sealant manufacturer agreeing to furnish joint sealants to repair or replace those that fail to provide airtight and watertight joints, or fail in adhesion, cohesion, abrasion resistance, stain resistance, weather resistance, durability, or appear to deteriorate in manner not specified in the manufacturer's data as an inherent quality of the material within specified warranty period.
 - 1. Warranty Period: 5 years from date of Substantial Completion.
- C. Warranties specified exclude deterioration or failure of sealants from:
 - 1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
 - 2. Disintegration of joint substrates from natural causes exceeding design specifications.
 - 3. Mechanical damage caused by individuals, tools, or outside agents.
 - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Compatibility: Provide joint sealants, backings, and related materials compatible with one another and with joint substrates under conditions of service and application, as stated by sealant

manufacturer's published data, and as substantiated by the manufacturer for each application through testing.

- B. Liquid Applied Sealants: Comply with ASTM C 920 and requirements indicated for each liquid applied sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- C. Stain Test Response Characteristics: For sealants in contact with porous substrates, provide nonstaining products that have undergone testing according to ASTM C 1248 and do not stain porous joint substrates.
- D. Suitability for Contact with Food: Where sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.
- E. Colors: For fully concealed joints, provide standard color of sealant that has the best overall performance characteristics for the application shown. For exposed joints, submit color samples to architect for approval, from manufacturer's full line of standard colors.
- F. Manufacturer's Representative: Use sealant produced by manufacturer who agrees to send a qualified technical representative to site upon request for the purpose of rendering advice concerning the recommended installation of manufacturer's materials.
- G. Sealants: Self leveling compounds for horizontal joints in pavements and nonsag compounds elsewhere except as shown or specified.
- H. Silicone Sealant: Comply with ASTM C920, Type M, Grade NS, Class 25; use NT, M, A and O.
 - 1. Use: Typical joints between metals, glass and plastics (Two part silicone sealants).
 - 2. Properties: Performance: Nonstain, nonbleed, nonstreaking to sealed and adjacent substrates. The minimum pli value after 7 day immersion shall not be less than 13 when tested in strict accordance with ASTM C794 Adhesion and Peel.
 - 3. Cure System and Oil Content: Neutral Cure System specifically manufactured with controlled oil content to eliminate oil migration into sealed substrates and residue rundown over and onto adjacent substrates.
 - 4. Product and Manufacturer: Dow Corning; 756 Silicone Building Sealant - HP with Additive.
- I. Silicone Sealant: ASTM C 920, Type S, Grade NS, Class 50, for Use NT.
 - 1. Use: Typical joints between metals, glass and plastics (Single component sealants).
 - 2. Properties: Performance: Nonstain, nonbleed, nonstreaking to sealed and adjacent substrates.
 - 3. Cure System and Oil Content: Neutral Cure System specifically manufactured with controlled oil content to eliminate oil migration into sealed substrates and residue rundown over and onto adjacent substrates.
 - 4. Product and Manufacturer:
 - a. BASF Building Systems; Omniseal 50.
 - b. Dow Corning Corporation; 756 SMS, 791, 795, 995 as applicable.
 - c. GE Advanced Materials, Silicones; SilGlaze II SCS2800, SilPruf NB SCS9000, SilPruf SCS2000, or UltraPruf II SCS2900 as applicable.
 - d. Sika Corporation, Construction Products Division; SikaSil-C995.
- J. Polyurethane Sealants: ASTM C920, Type M, Grade NS, Class 25; use NT, M, A and O.
 - 1. Use: Typical Wall and Floor Joints (Two part polyurethane sealants).
 - 2. Properties: Performance: Nonstain, nonbleed, nonstreaking to sealed and adjacent substrates.
 - 3. Products and Manufacturers:
 - a. BASF Building Systems; Sonolastic NP-2.

- b. Pecora Corporation; Dynatred.
 - c. Sika Corporation, Construction Products Division; Sikaflex 2c NS or Sikaflex 2c NS TG as applicable.
- K. Two Part Polyurethane Sealants: ASTM C920, Type M, Grade NS, Class 50; use NT, M, A and O.
- 1. Use: Typical Wall and Floor Joints (Two Part Polyurethane Sealants).
 - 2. Properties: Performance: Nonstain, nonbleed, nonstreaking to sealed and adjacent substrates. The minimum pli value after 7 day immersion shall not be less than 13 when tested in strict accordance with ASTM C794 Adhesion in Peel.
 - 3. Products and Manufacturers: One of the following:
 - a. Schnee-Morehead, Inc.; Permthane SM 7200.
 - b. Sika Corporation, Inc.; Sikaflex - 2c NS TG.
 - c. BASF Construction Chemicals; NP 2.
- L. Mildew Resistant Silicone Sealant: ASTM C920, Type S, Grade NS, Class 25, Use NT, Substrate uses G, A, and O; and containing fungicide for mildew resistance; acid curing.
- 1. Use: Joints at toilet fixtures, toilet room countertops and vanities, wet areas, and janitor closet mop receptor to wall transition.
 - 2. Products: Provide one of the following:
 - a. BASF Building Systems; Omniplus.
 - b. Dow Corning; 786 Mildew Resistant Silicone Sealant.
 - c. GE Silicones; Sanitary SCS 1700.
- M. Latex Sealant: Nonelastomeric, one part, nonsag, paintable latex sealant that is recommended for exposed applications on the interior. Complying with ASTM C 834, Type OP (opaque sealants):
- 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Pecora Corporation; AC-20 + Silicone.
 - b. BASF; Sonolastic Sonolac.
- N. Acoustical Joint Sealant: Nonsag, paintable, nonstaining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.
- 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. Pecora Corporation; AC-20 FTR or AIS-919.
 - b. USG Corporation; SHEETROCK Acoustical Sealant.
- O. Sealant Backing: Provide sealant backings that are nonstaining; compatible with joint substrates, sealants, primers, and joint fillers; and approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- 1. Cylindrical Sealant Backings: Preformed, compressible, resilient, nonstaining, nonwaxing, nonextruding backings of flexible plastic foam complying with ASTM C 1330, and of type indicated below. Select shape and density of cylindrical sealant backings in consultation with the manufacturer for proper performance in specific condition of use in each case.
 - 2. Type C: Closed cell polyethylene foam material with surface skin, nonabsorbent to liquid water and gas, nonoutgassing in unruptured state; one of the following:
 - a. HBR Closed Cell Backer Rod; Nomaco, Inc.
 - b. Sonolastic Closed-Cell Backer-Rod; BASF Construction Chemicals.
- P. Miscellaneous Materials:
- 1. Primer: Material recommended, as verified through compatibility and adhesion testing, by joint sealant manufacturer for the substrates indicated to be sealed.
 - 2. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable

- of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants with joint substrates.
3. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and which will not stain nor mar the finish of surface adjacent to joints to which it is applied.
 4. Cork Joint Filler: Resilient and nonextruding, ASTM D1752, Type II.
 5. Bond Breaker Tape: Polyethylene, TFE fluorocarbon, or plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self adhesive tape where applicable.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants for compliance with requirements for joint configuration, installation tolerances, and conditions affecting sealant performance. Proceed with installation after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with the recommendations of joint sealant manufacturer and requirements:
 1. Remove foreign material from joint substrates interfering with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), existing joint sealants, oil, grease, water, surface dirt, and frost.
 2. Clean concrete, masonry, unglazed surfaces of tile, and similar porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil free compressed air.
 3. Remove laitance and form-release agents from concrete.
 4. Clean metal, glass, porcelain enamel, glazed surfaces of tile, and other nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
- B. Joint Priming (Elastomeric Sealants Only): Prime joint substrates where recommended in writing by joint sealant manufacturer, based on prior testing and experience. Apply primer to comply with joint sealant manufacturer's written instructions. Confine primers to areas of joint sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION

- A. Silicone Glazing Sealants: Refer to Section 088000.
- B. Comply with joint sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- C. Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants applicable to materials, applications, and conditions indicated.

- D. Sealant Backings: Install sealant backings to support sealants during application and at position necessary to produce cross sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
1. Do not leave gaps between ends of sealant backings. Trim for tight fit around obstructions or elements penetrating the joint.
 2. Do not stretch, twist, puncture, or tear sealant backings.
 3. Remove absorbent sealant backings that become wet before sealant application and replace with dry sealant backings.
 4. Install bond breaker tape behind sealants where backings are not used between sealants and back of joints.
- E. Weeps and Vents: Install weeps and vents into joints at the same time sealants are being installed. Locate weeps and vents spaced recommended by sealant manufacturer and the window and curtain wall fabricator and erector. Do not install weeps and vents at outside building corners. Do not install vents at horizontal joints immediately below shelf angles, sills, and through wall flashings.
- F. Sealants: Install sealants by proven techniques resulting in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross sectional shapes and depths relative to joint widths that allow optimum sealant movement capability. Install sealants at same time sealant backings are installed.
1. Apply sealants in depth in accordance with manufacturer's recommendations and recommended general proportions and limitations.
 2. Apply elastomeric sealants, in joints not subject to traffic or abrasion, to a depth equal to 50% of the joint width, but not less than 1/4 inch (6 mm) and not more than 1/2 inch (13 mm).
 3. Apply nonelastomeric sealants to a depth approximately equal to the joint width.
- G. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants to form smooth, uniform, beads to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents that discolor sealants or adjacent surfaces. Tool exposed surfaces of sealants to the profile shown, or if none is shown, tool slightly concave.
1. Use masking tape to protect adjacent surfaces of recessed tooled joints.
 2. Provide a slight wash on horizontal joints where horizontal and vertical surfaces meet.
 3. Against rough surfaces or in joints of uneven widths avoid the appearance of excess sealant or compound by locating the compound or sealant well back into joint wherever possible.
- H. Installation of Preformed Silicone Sealant System:
1. Apply masking tape to each side of joint, outside of area to be covered by sealant system.
 2. Apply silicone sealant to each side of joint to produce a bead of size complying with preformed silicone sealant system manufacturer's written instructions and covering a bonding area of not less than 3/8 inch (10 mm). Hold edge of sealant bead 1/4 inch (6 mm) inside masking tape.
 3. Within 10 minutes of sealant application, press silicone extrusion into sealant to wet extrusion and substrate. Use a roller to apply consistent pressure and ensure uniform contact between sealant and both extrusion and substrate.
 4. Complete installation of sealant system in horizontal joints before installing in vertical joints. Lap vertical joints over horizontal joints. At ends of joints, cut silicone extrusion with a razor knife.
- I. Installation of Preformed Foam Sealants: Install each length of sealant immediately after removing protective wrapping. Do not pull or stretch material. Produce seal continuity at ends, turns, and intersections of joints. For applications at low ambient temperatures, apply heat to sealant in compliance with sealant manufacturer's written instructions.

- J. Acoustical Sealant Installation: At sound rated assemblies and elsewhere as indicated, seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer written recommendations.

3.4 FIELD QUALITY CONTROL

- A. Field Adhesion Testing: Field test exterior wall joint sealant adhesion to joint substrates:
 - 1. Extent of Testing: Test completed and cured sealant joints:
 - a. Perform 10 tests for the first 1000 feet (300 m) of joint length for each kind of sealant and joint substrate.
 - b. Perform 1 test for each 1000 feet (300 m) of joint length thereafter or 1 test per each floor per elevation.
 - 2. Test Method: Test joint sealants according to Method A, Field Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521. For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
 - 3. Inspect tested joints and report on the following:
 - a. Whether sealants filled joint cavities and are free of voids.
 - b. Whether sealant dimensions and configurations comply with specified requirements.
 - c. Whether sealants in joints connected to pulled out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer field adhesion hand pull test criteria.
 - 4. Record test results in a field adhesion test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration, and sealant dimensions.
 - 5. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure original sealant surfaces are clean and new sealant contacts original sealant.
- B. Evaluation of Field Adhesion Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

3.5 SITE ENVIRONMENTAL PROCEDURES

- A. Indoor Air Quality: Provide temporary ventilation during work.

3.6 CLEANING AND PROTECTION

- A. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.
- B. Protect joint sealants during and after curing from contact with contaminating substances and from damage so sealants are without deterioration or damage at time of Substantial Completion. If, despite protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from the original work.

END OF SECTION 07 92 00

SHERIFF'S & MORGUE BUILDING - ROOFING SCOPE OF WORK
2500 EAST GIBSON ROAD, WOODLAND, CA 95776

BASE ROOF SCOPE OF WORK:

CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF EXISTING ROOFING SYSTEM DOWN TO ROOF DECK AT DESIGNATED AREA ON ROOF PLANS APPROXIMATELY 200 SQUARE FEET, REMOVE ALL EXISTING WALL, CURB FLASHINGS AND EXISTING WALKING PADS. REMOVE / REPLACE EXISTING ROOF DECK AREAS THAT SHOW EVIDENCE OF DRY ROT, INFILL AREA TO MATCH EXISTING ROOF ELEVATION. CLEAN AND PREP EXISTING SUBSTRATE TO RECEIVE NEW SUBSTRATE. MECHANICALLY ATTACH 1/2" RECOVERY BOARD, FULLY ADHERE NEW SPECIFIED 60 MIL PVC ROOF MEMBRANE WITH NEW ASSOCIATED SHEET METALS, NEW RECEIVER/ REMOVABLE COUNTER FLASHINGS AT BASE OF METAL PARAPET WALLS ROOF AREA A1, NEW COPING CAPS, TRIM, AND EXPANSION JOINTS METAL. EXISTING ELECTRICAL/GAS/CONDENSATE LINES ARE TO BE INSTALLED AT NEW ROOF ELEVATIONS ON SPECIFIED PIPE SUPPORTS IF NEW EXISTING LINE NEEDS TO BE RAISED TO PROPERLY FIT NEW SUPPORT HEIGHT MINIMUM 6" WITH PROTECTION PADS. CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF EXISTING T-111 SIDING AT VERTICAL PARAPET WALLS AT AREA B1 OF THE COUNTY MORGUE. INSTALL NEW 36" WIDE R PANELING WITH NON-CONCEALED FASTENERS AS PER MANUFACTURERS SPECIFICATIONS.

ALTERNATE "A" - WALL PANELS SCOPE OF WORK - MORGUE BUILDING:
CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF EXISTING T-111 SIDING AT VERTICAL PARAPET WALLS. INSTALL NEW 16" WIDE MERIDIAN PANELING WITH CONCEALED FASTENERS AS PER MANUFACTURERS SPECIFICATIONS.

A. CONTRACTOR SHALL VISIT SITE TO ASCERTAIN EXACT EXISTING CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUEST FOR ADDITIONAL MONEY SHALL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING THE SITE VISIT BY THE CONTRACTOR, ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS & WARRANTY REQUIREMENTS.

B. DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE DOCUMENTS ARE FOR INFORMATION AND REFERENCE ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN & CONFIRM.

C. ALL NEW CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED 1/4" PER FOOT MIN. SLOPE. CRICKET THE UP SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS.

D. REMOVE ALL ABANDONED EQUIP. IDENTIFIED ON ROOF TOP AND AS SHOWN ON DRAWINGS -(PATCH DECK) HOLES LESS THAN 10" WIDE- SCREW 22 GA. STAINLESS STEEL SHEET METAL TO EXISTING DECK HOLES GREATER THAN 10" WIDE- SCREW NEW METAL DECK (MATCH EXISTING) SPAN FROM JOIST TO JOIST.

E. ALL HVAC AND/OR DX UNITS, ELECTRICAL TRANSFORMERS, ROOF TOP EQUIPMENT, ETC. THAT ARE ON SLEEPERS SHALL BE DISCONNECTED/REMOVED, RAISED, & PLACED ON NEW CURBED PLATFORMS (RE: DETAIL), AND RECONNECTED/RE-INSTALLED. VERIFY ALL EXISTING CURB MOUNTED UNITS, EQUIPMENT, ETC. HAVE A MINIMUM 10" CURB HEIGHT (RAISED AS REQUIRED) - ALL DISCONNECTS AND RECONNECTS SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.

F. IF EXISTING ELECTRICAL/GAS/WATER/ETC. LINES ARE MODIFIED- ONLY LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL SHALL PERFORM THAT TYPE OF WORK. PERMITS AND INSPECTIONS REQUIRED- PROVIDE "MERCURY" GAS LINE TEST (COORDINATE OWNER/ARCHITECT WITNESS OF TEST), REPAIR ALL LEAKS AND RE-TEST

G. REPLACE AND RAISE (AS REQUIRED) ALL EXISTING EXPANSION JOINTS/AREA DIVIDERS/ CURB MOUNTED EQUIPMENT/ SKYLIGHTS A MIN. 10" ABOVE ROOF DECK. (UNLESS INDICATED OTHERWISE ON DRAWING.)

H. ENSURE ALL SOIL STACK FLASHING IS MIN. 10" ABOVE ROOF. COUPLE PVC PIPE ABOVE DECK, COUPLE CAST IRON PIPE UNDER DECK.

I. PROVIDE SHEET METAL HOODED (w/METAL FACE CLOSURE), WOOD CURB, BOX COVER AT ALL GAS LINE AND WATER LINE ROOF PENETRATIONS (RE: DETAILS). ENSURE LINES SLOPE AWAY FROM FACE COVER.

J. PROVIDE WALKWAY PROTECTION PADS (AS ACCEPTABLE TO MANUFACTURER-RE: SPECS.) AROUND ALL ROOF HATCHES, A/C UNITS, DOORS THAT OPEN ONTO ROOF, AND AT ALL ROOF TOP ACCESS LADDERS (TOP & BOTTOM)

K. ISOLATE ALL HEAT PIPES/FLUES AS RECOMMENDED & OUTLINED IN THE NRCA MANUAL FOR ISOLATED STACK FLASHING- (RE:DETAILS)

L. ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING WORK.

M. EXAMINE AND CLEAN EXISTING DRAIN LINES OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS FLOW FREELY.

N. OWNER WILL VERIFY CORRECT OPERATION OF ALL ROOF TOP EQUIPMENT BEFORE AND AFTER PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL INOPERABLE EQUIPMENT PRIOR TO RELEASE OF RETAINAGE.









O. REPLACE ALL RUSTED/DETERIORATED EXISTING METAL VENT FLASHING AND FLUES.

P. COORDINATE WALK OF ENTIRE ROOF (PRIOR TO STARTING) WITH ROOFING MANUFACTURER'S TECHNICAL REP. TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.

4 SCOPE OF WORK
NOT TO SCALE

- ① CONTRACTOR TO INSTALL NEW 3 SIDED HOOD AT LOUVERS & DOORS TO MAINTAIN A WATERTIGHT FLASHING AT WALL PANELS.
- ② INSTALL NEW LIQUID FLASHING AT LOW PLUMBING VENTS (RE: 6/A4)
- ③ CURBS TO BE RAISED A MINIMUM 10" ABOVE NEW ROOF ELEVATION.
- ④ REMOVE EXISTING ABANDON CURB.
- ⑤ REMOVE EXISTING WALK PADS.

3 KEYED NOTES
NOT TO SCALE

∅	PLUMBING VENT (RE:5/A4)		EXISTING AREAS TO REMAIN - NIC
■	PITCH PAN (RE:6/A4)		WALKPAD (RE:4/A5)
⊕	EXIST. ROOF DRAIN (RE:3/A5)		NEW TAPERED INSULATION/CRICKET
○	OVERFLOW DRAIN (RE:2/A3)		ANOMALIES MOISTURE AREAS
PB	PIPE BOX ON WALL	—	RIDGE LINE
	CURB MOUNTED VENT (RE:1/A4)	←	SLOPE INDICATOR
	CURB MOUNTED VENT (RE:1/A4)	— · — · —	DESIGNATES EXTENTS OF WORK IDENTIFIED BY KEYED NOTES
A/C	CURB MOUNTED A/C (RE:1/A4)	A1	ROOF AREA DESIGNATION
⊙	BOILER VENT (RE:4/A4)	—○—	CONDENSATE LINE (RE:2/A4)
⚡	ANTENNA		EXHAUST AND SUPPLY FAN (RE:1/A4)
	ROOF HATCH (RE:6/A5)		
A	ABANDON EQUIP.		

2 GENERAL LEGEND
NOT TO SCALE

1 GENERAL NOTES
NOT TO SCALE



BEAM Professionals, Inc.
2520 Venture Oaks Way
Suite 440
Sacramento, CA 95833
916-927-4444 P
916-682-0990 F
BEAMProf.com

Project: SHERIFF'S & MORGUE
ROOF PROJECT

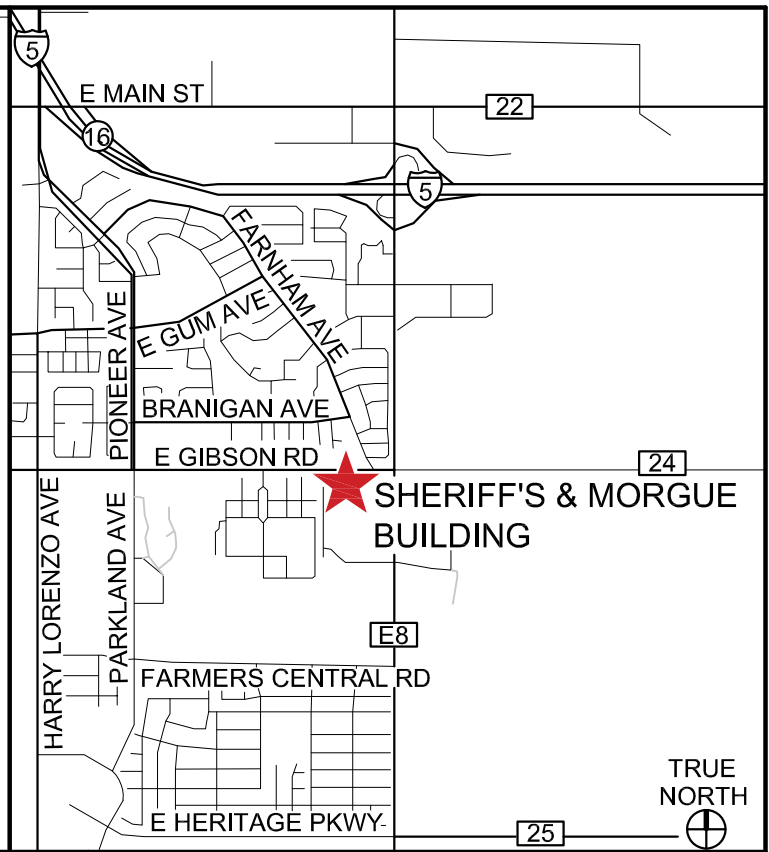
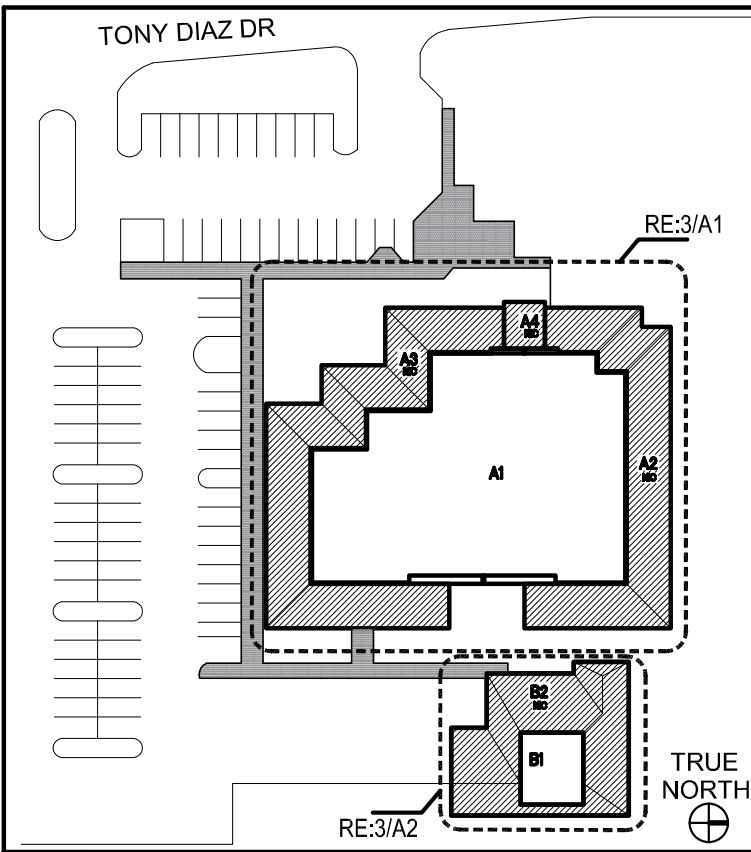
Project No. 20333R & 20334R

Description: ISSUED FOR COMPETITIVE SEALED BID

Date: 07/28/21

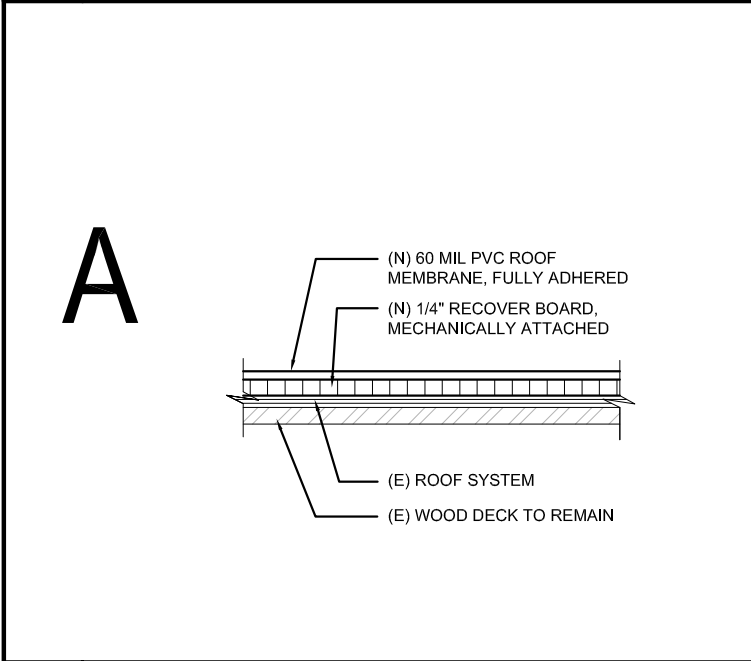
Sketch No. **G0**





3 SITE MAP
1"=80'-0"

4 VICINITY MAP
NOT TO SCALE



AREA	APPROX. SQ. FT.	EXISTING NOMENCLATURE	NEW NOMENCLATURE	REMARKS
SHERIFF'S BUILDING				
A1	10,852	WD /PB 1/2" /MB /SC	A	-
A2	NIC	NIC	-	-
A3	NIC	NIC	-	-
A4	NIC	NIC	-	-
MORGUE BUILDING				
B1	780	WD /PB 1/2" /MB /SC	A	1
B2	NIC	NIC	-	-
TOTAL	11,632			

NOTE: SQUARE FOOTAGE'S SHOWN ARE FOR REFERENCE ONLY - (FIELD VERIFY) CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND FOR ENSURING NEW CONDITIONS ADHERE TO ALL LOCAL AND FEDERAL CODES ALONG WITH INDUSTRY STANDARD GUIDELINES AND REMAIN IN A WATERTIGHT CONDITION

ABBREVIATIONS:

WD:	WOOD DECK	AS:	ASPHALT SHINGLES
MB:	MODIFIED BITUMEN ROOF SYSTEM	BS:	BASE SHEET
PB:	PERLITE BOARD	NIC:	NOT IN CONTRACT
SC:	SILICON COATING	FA:	FULLY ADHERED
WP:	WATERPROOFING	MA:	MECHANICALLY ATTACHED

REMARKS:

- ALTERNATE "A" - INSTALL NEW 16" MERIDIAN PANEL AT VERTICAL WALL

2 NEW NOMENCLATURE
NOT TO SCALE

1 EXISTING NOMENCLATURE
NOT TO SCALE

BEAM
PROFESSIONALS

BEAM Professionals, Inc.
2520 Venture Oaks Way
Suite 440
Sacramento, CA 95833
916-927-4444 P
916-682-0990 F
BEAMProf.com

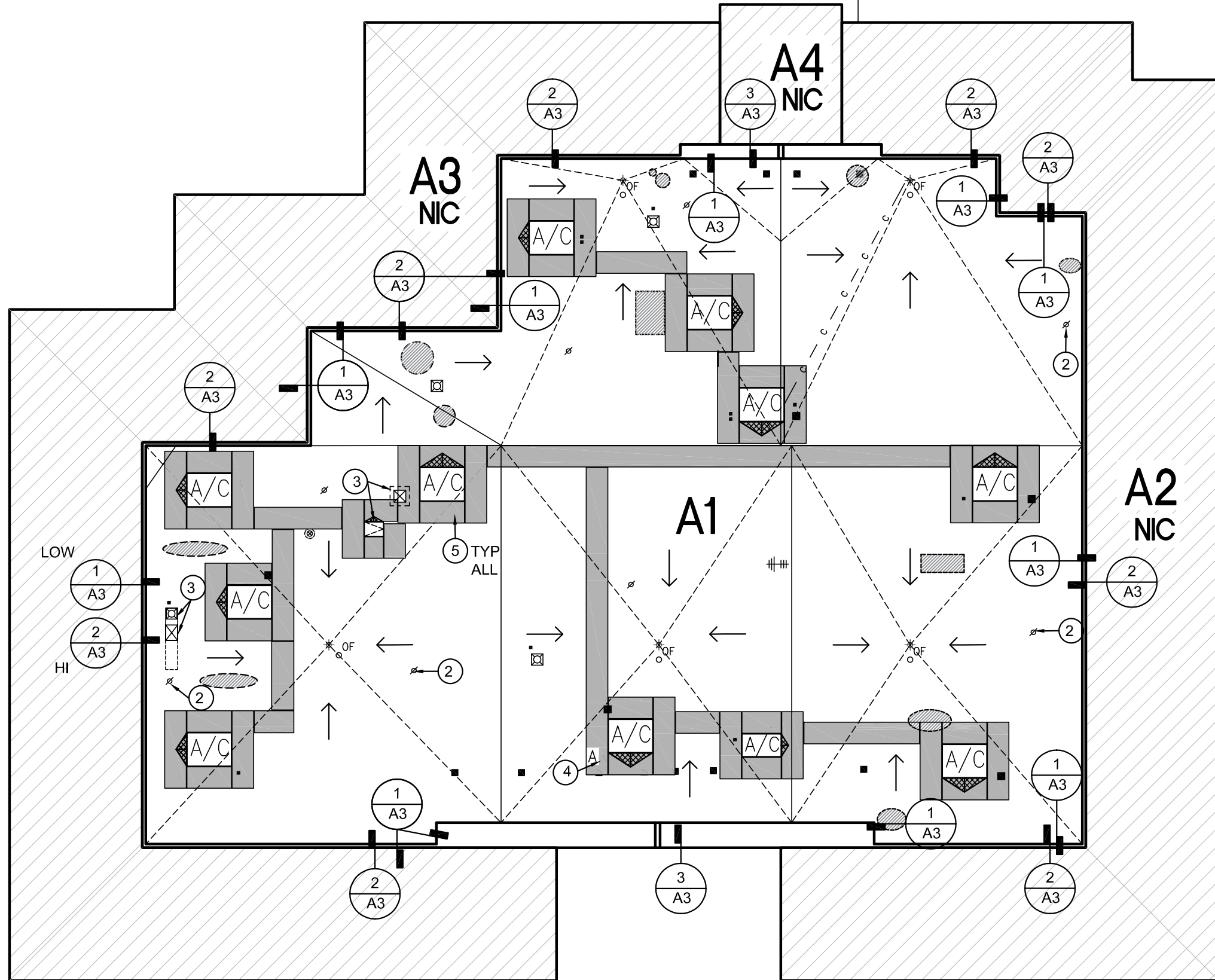
Project: SHERIFF'S & MORGUE ROOF PROJECT

Project No. 20333R & 20334R

Description: ISSUED FOR COMPETITIVE SEALED BID

Date: 07/28/21

Sketch No. **G1**



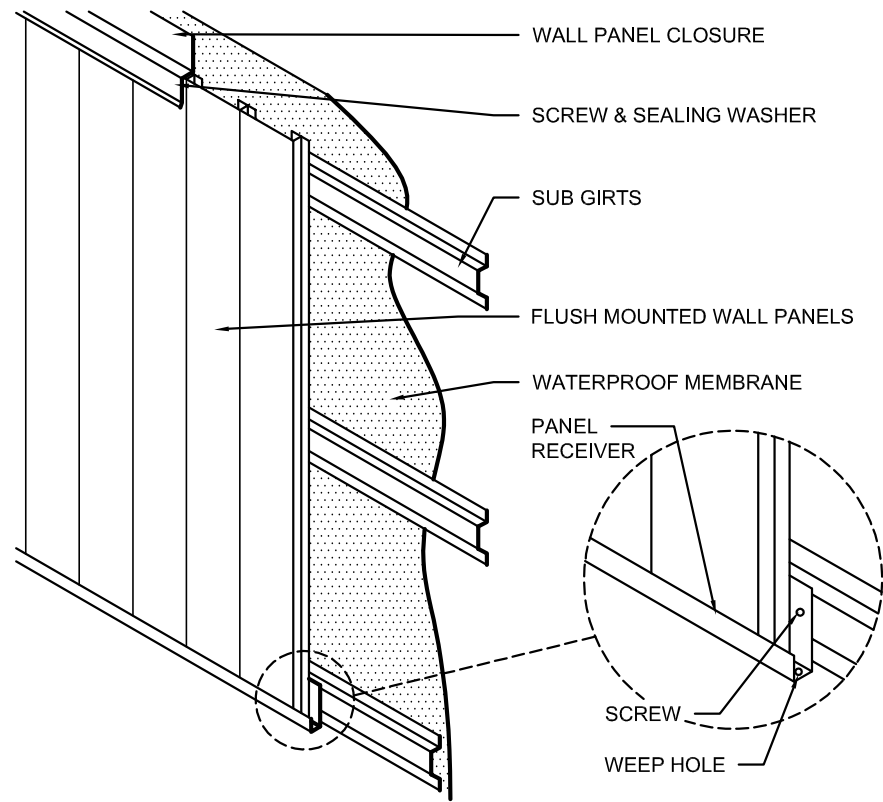
SHERIFF'S & MORGUE
ROOF PROJECT
COUNTY OF YOLO

DATE: 07/28/21
DRAWN BY: CFH
REVISED: TD

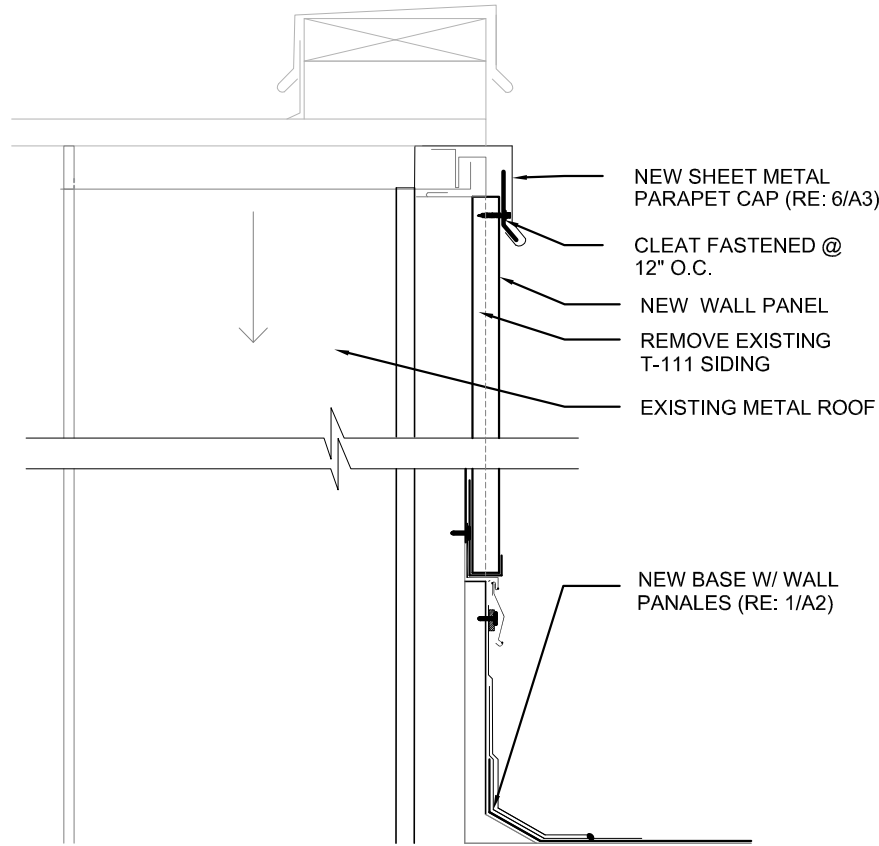
PROJECT NO.: 20333R & 20334R
DESCRIPTION: ISSUED FOR
COMPETITIVE SEALED BID

SKETCH NO.

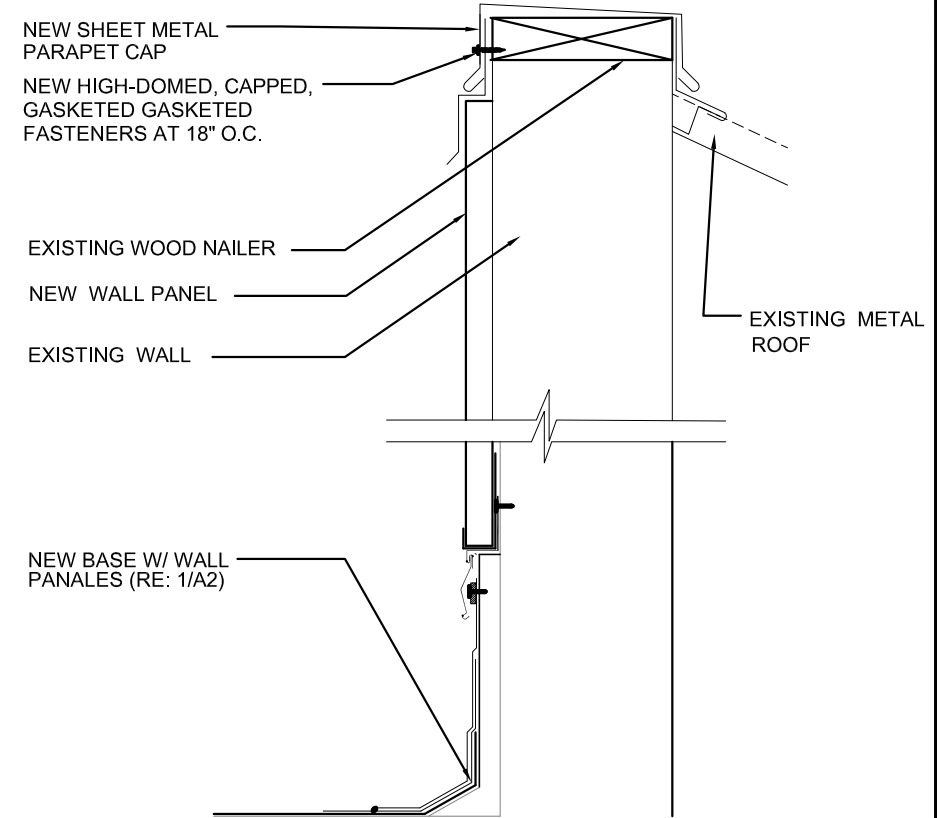
A1



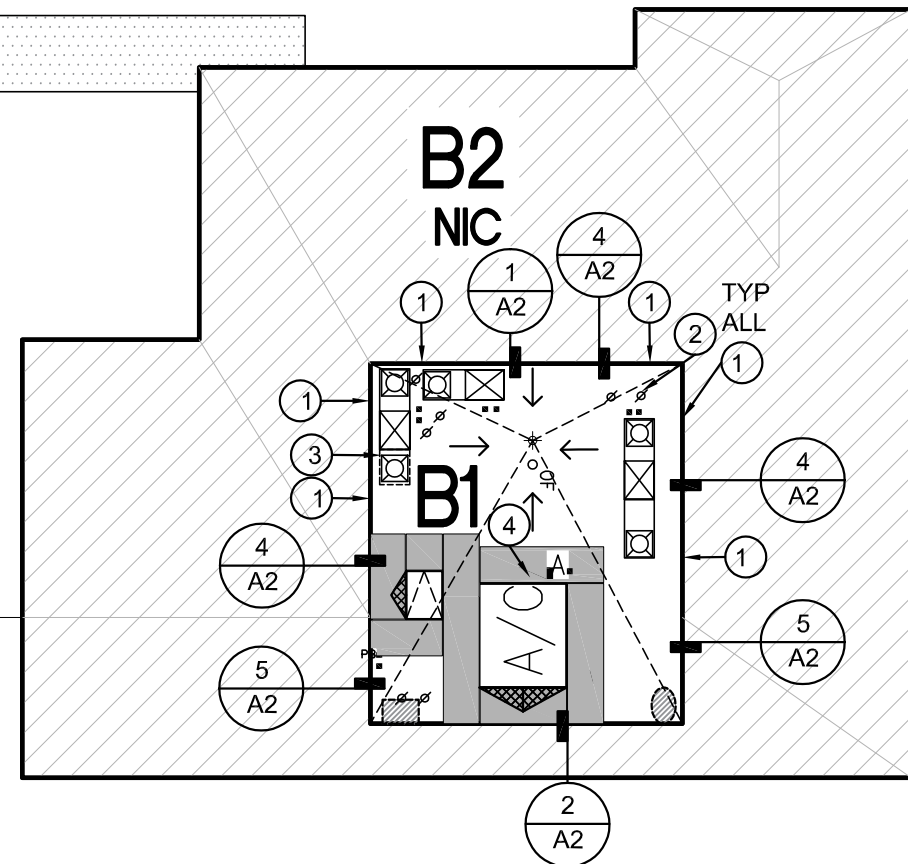
6 WALL PANELS
NOT TO SCALE



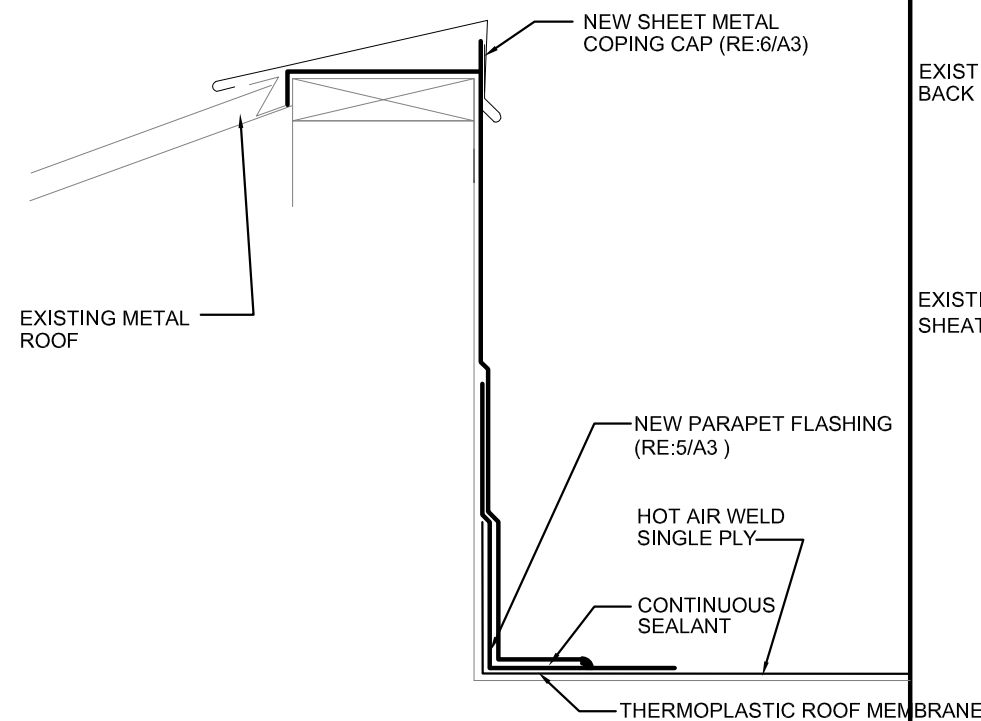
5 NEW PARAPET CAP & WALL PANELS
NOT TO SCALE



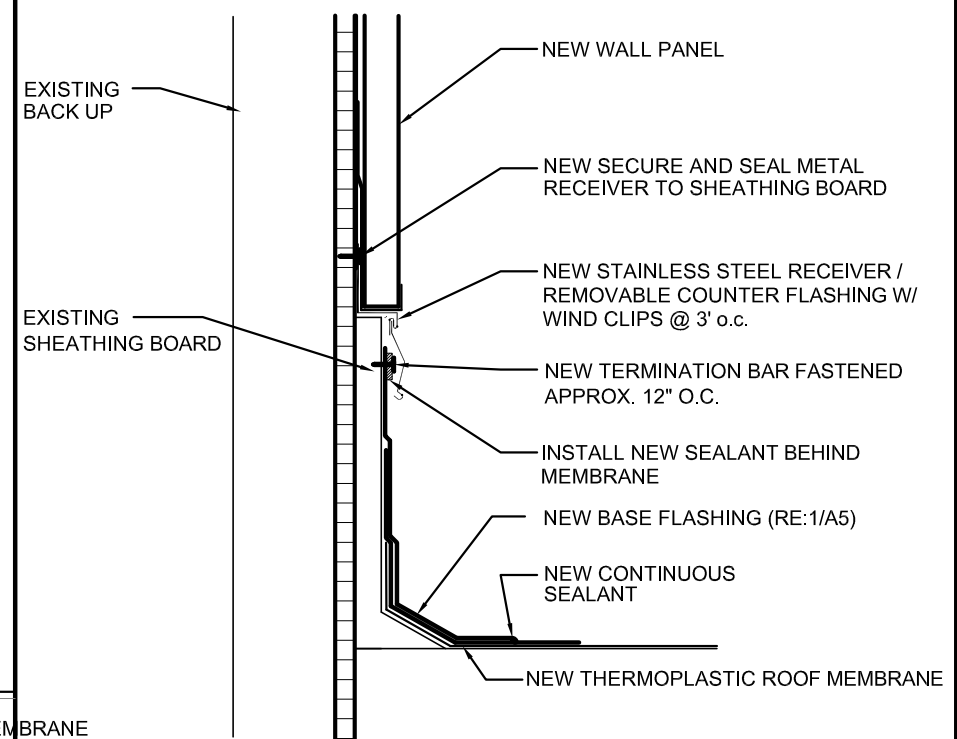
4 NEW PARAPET CAP & WALL PANELS
NOT TO SCALE



3 ENLARGED ROOF PLAN - MORGUE BLDG
1/16" = 1'-0"



2 NEW PARAPET FLASHING
NOT TO SCALE



1 BASE W/ NEW WALL PANEL
NOT TO SCALE

BEAM
PROFESSIONALS

2520 VENTURE OAKS WAY
SUITE 440 SACRAMENTO
CA 95833
Phone: 916.682.9494
Fax: 916.682.0990

SHERIFF'S & MORGUE
ROOF PROJECT
COUNTY OF YOLO

DATE: 07/28/21
DRAWN BY: CFH
REVISED: TD

PROJECT NO.: 20333R & 20334R
DESCRIPTION: ISSUED FOR
COMPETITIVE SEALED BID

SKETCH NO.

A2



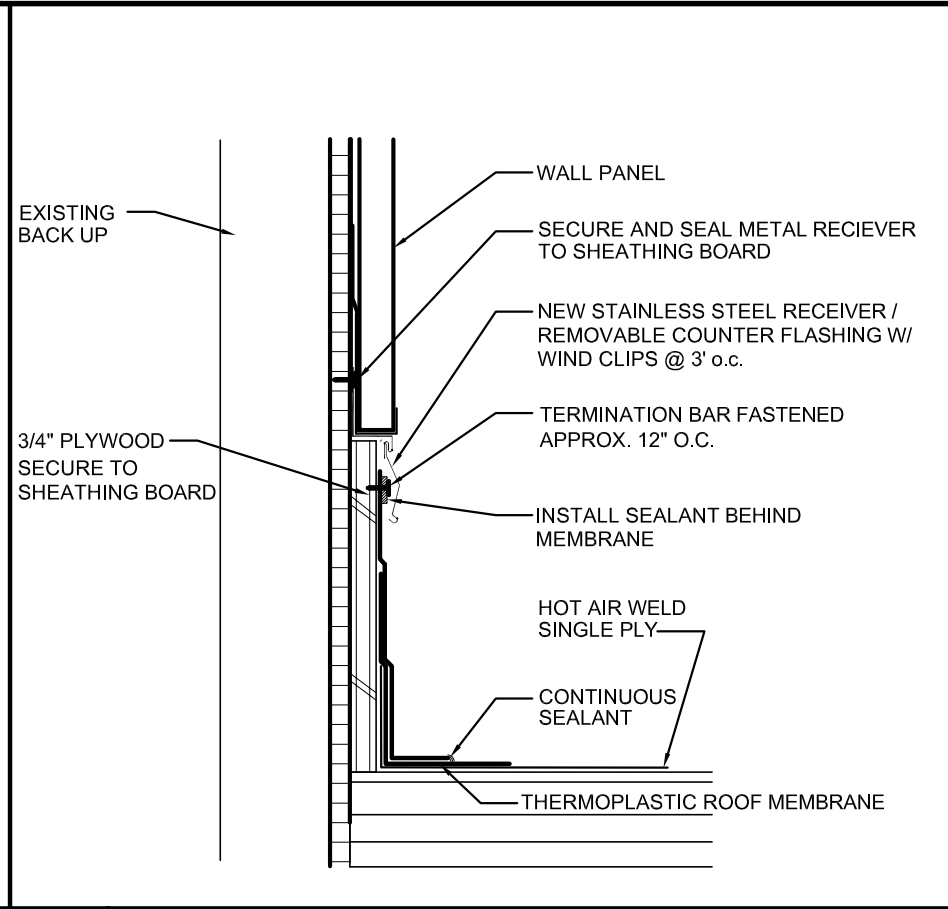
SHERIFF'S & MORGUE
ROOF PROJECT
COUNTY OF YOLO

DATE: 07/28/21
DRAWN BY: CFH
REVISED: TD

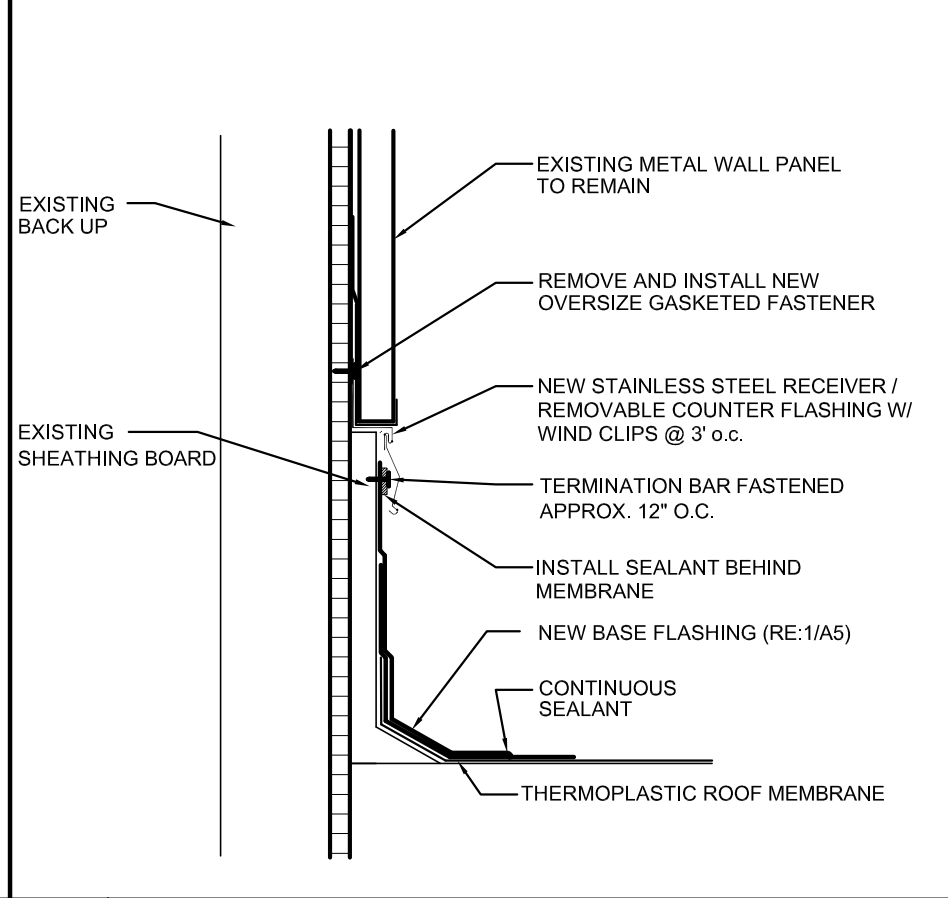
PROJECT NO.: 20333R & 20334R
DESCRIPTION: ISSUED FOR
COMPETITIVE SEALED BID

SKETCH NO.

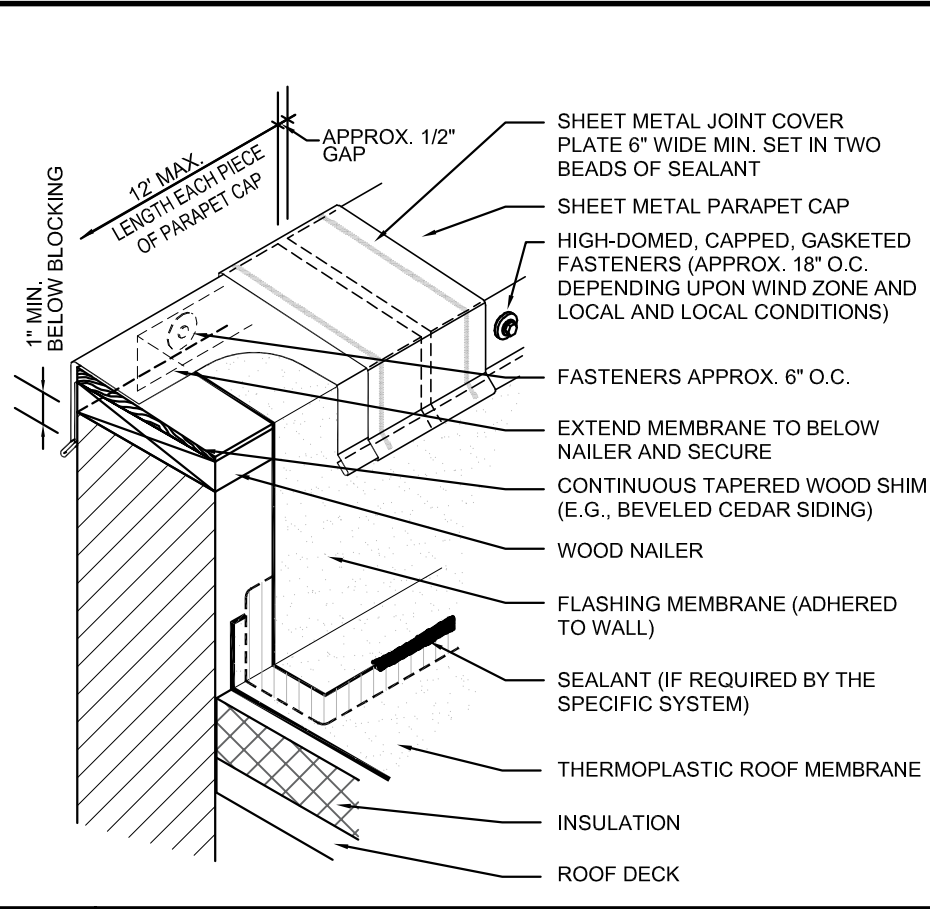
A3



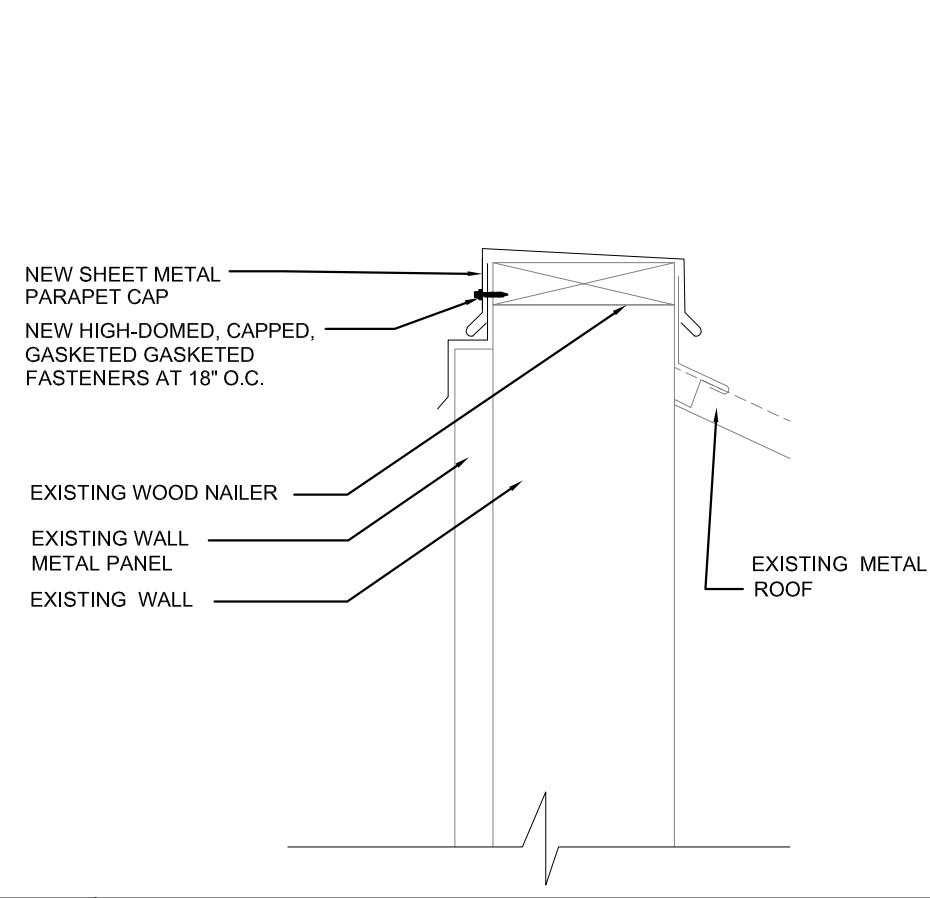
4 BASE W/ WALL PANEL
NOT TO SCALE



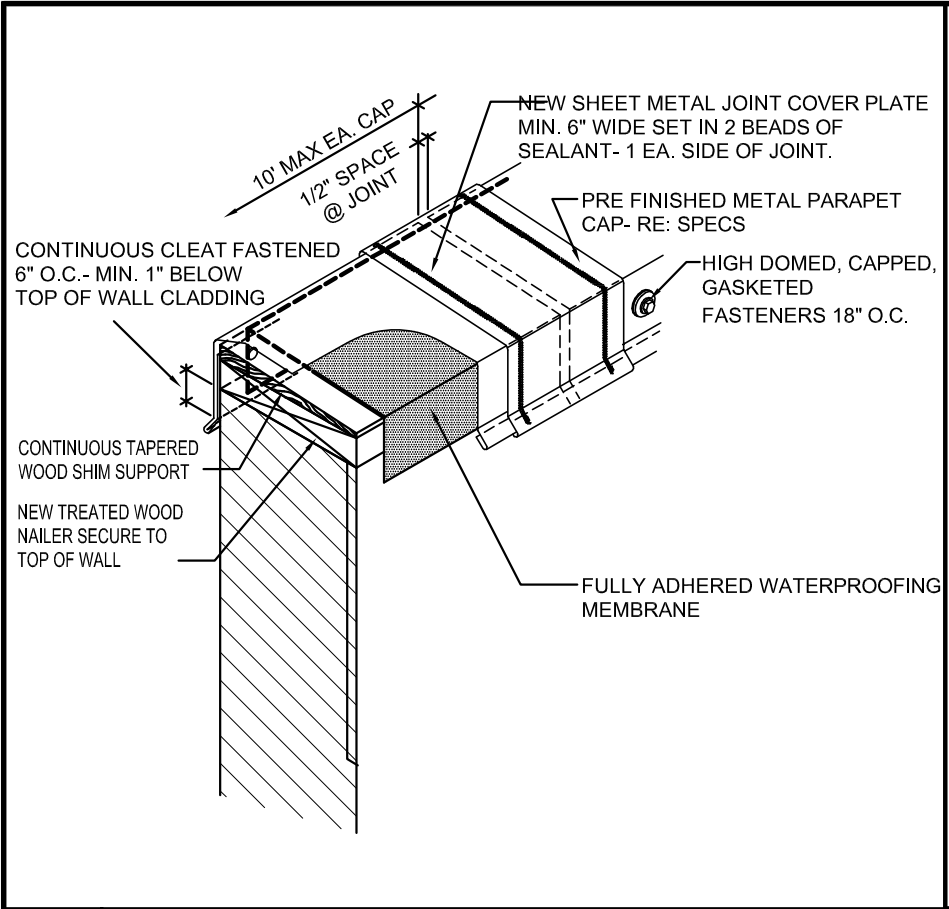
1 BASE W/ EXISTING WALL PANEL
NOT TO SCALE



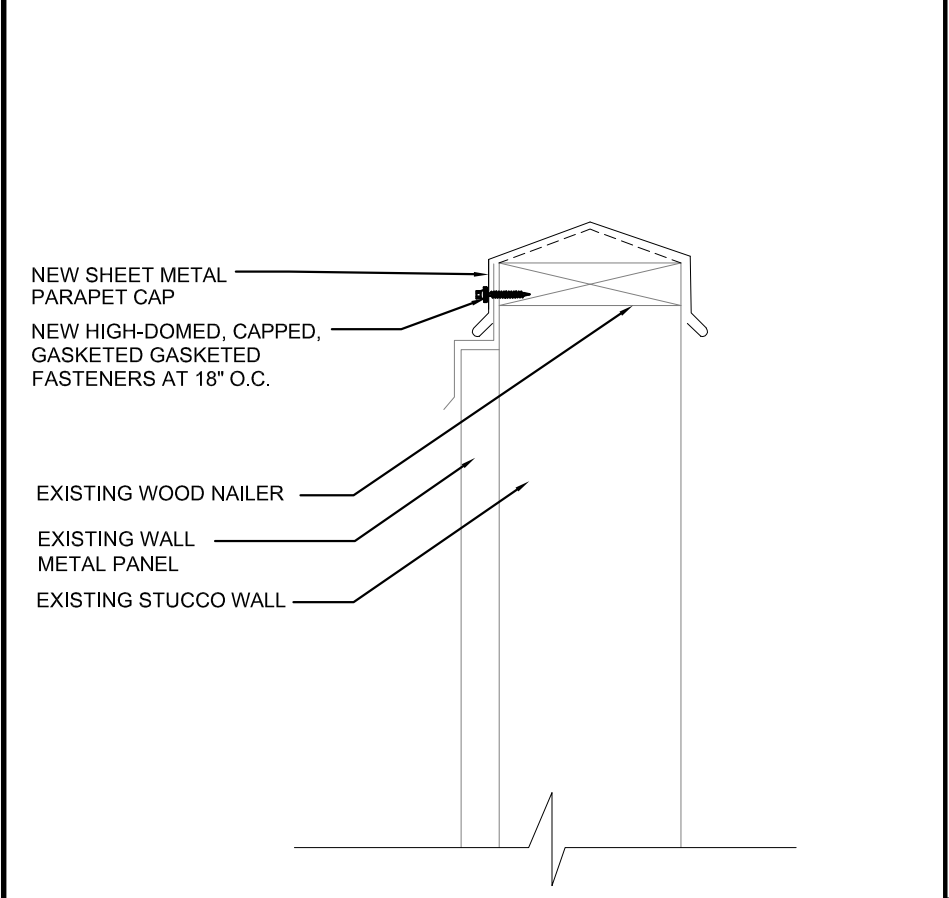
5 PARAPET & CAP
NOT TO SCALE



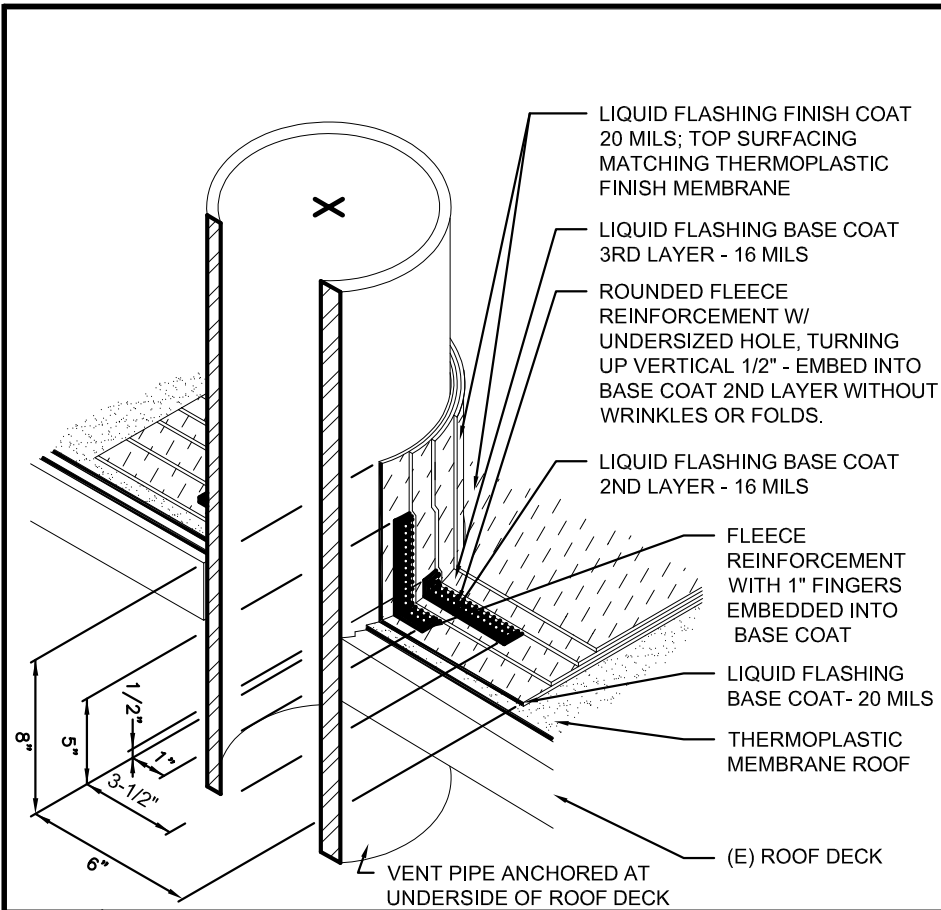
2 NEW PARAPET CAP @ METAL ROOF
NOT TO SCALE



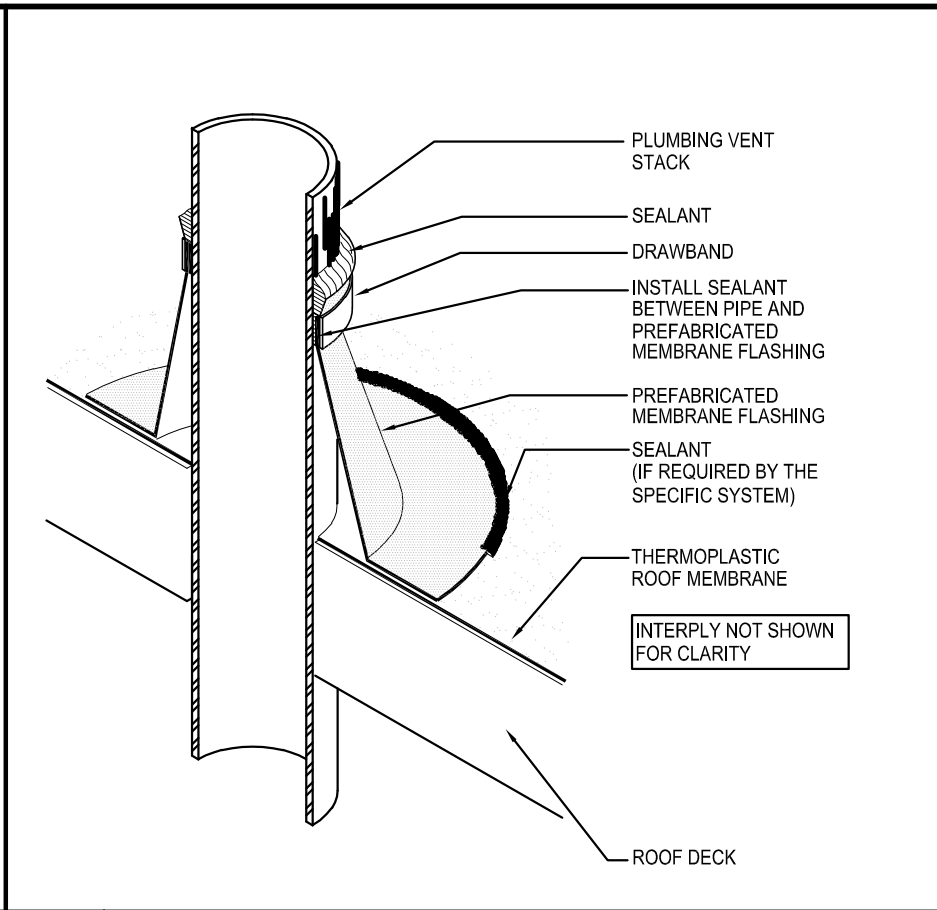
6 COPING CAP
NOT TO SCALE



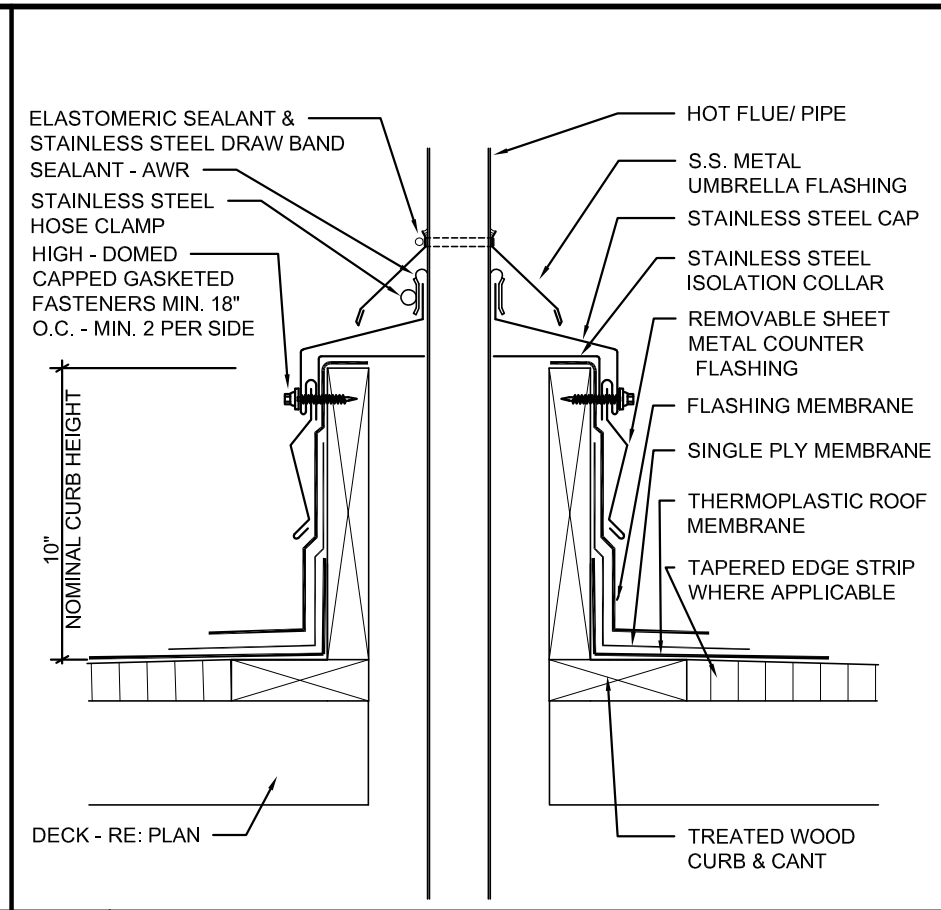
3 NEW PARAPET CAP
NOT TO SCALE



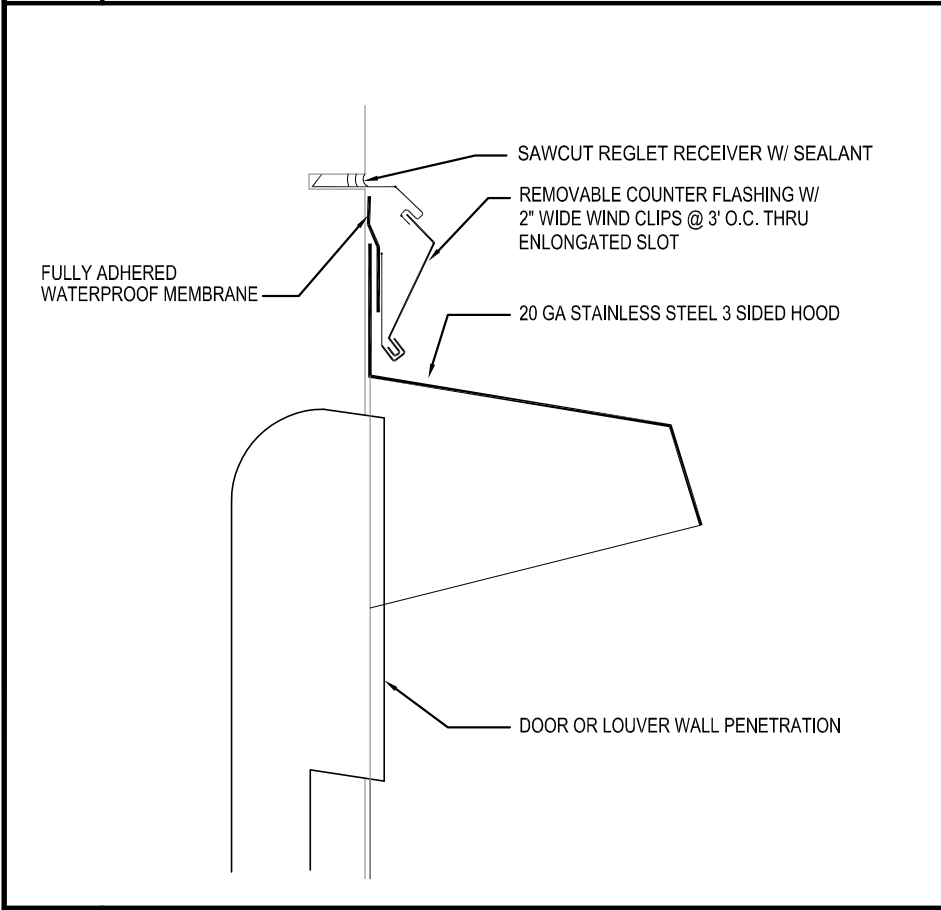
6 PIPE PENETRATION
NOT TO SCALE



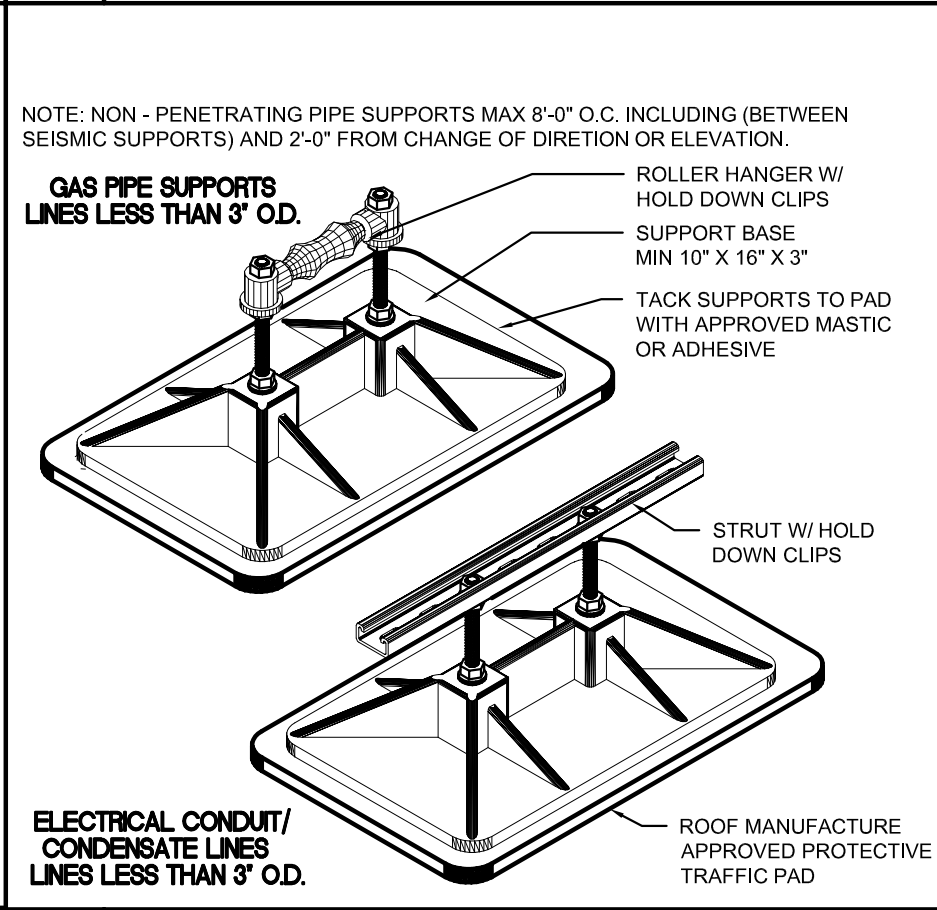
5 PLUMBING STACK
NOT TO SCALE



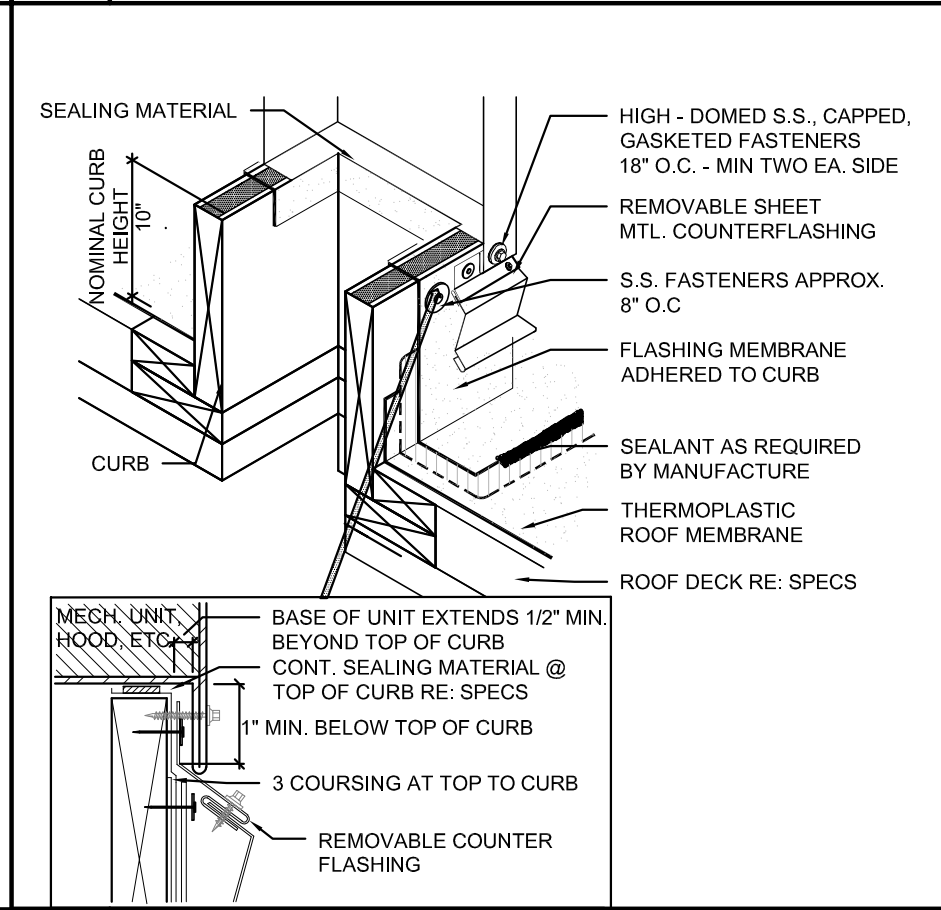
4 HOT STACK
NOT TO SCALE



3 THREE SIDED HOOD @ WALL
NOT TO SCALE



2 PIPE SUPPORTS
NOT TO SCALE



1 EQUIPMENT CURB
NOT TO SCALE

BEAM
PROFESSIONALS

2520 VENTURE OAKS WAY
SUITE 440 SACRAMENTO
CA 95633
Phone: 916.682.9494
Fax: 916.682.0990

SHERIFF'S & MORGUE
ROOF PROJECT
COUNTY OF YOLO

DATE: 07/28/21
DRAWN BY: CFH
REVISED: TD

PROJECT NO.: 20333R & 20334R
DESCRIPTION: ISSUED FOR COMPETITIVE SEALED BID

SKETCH NO.
A4

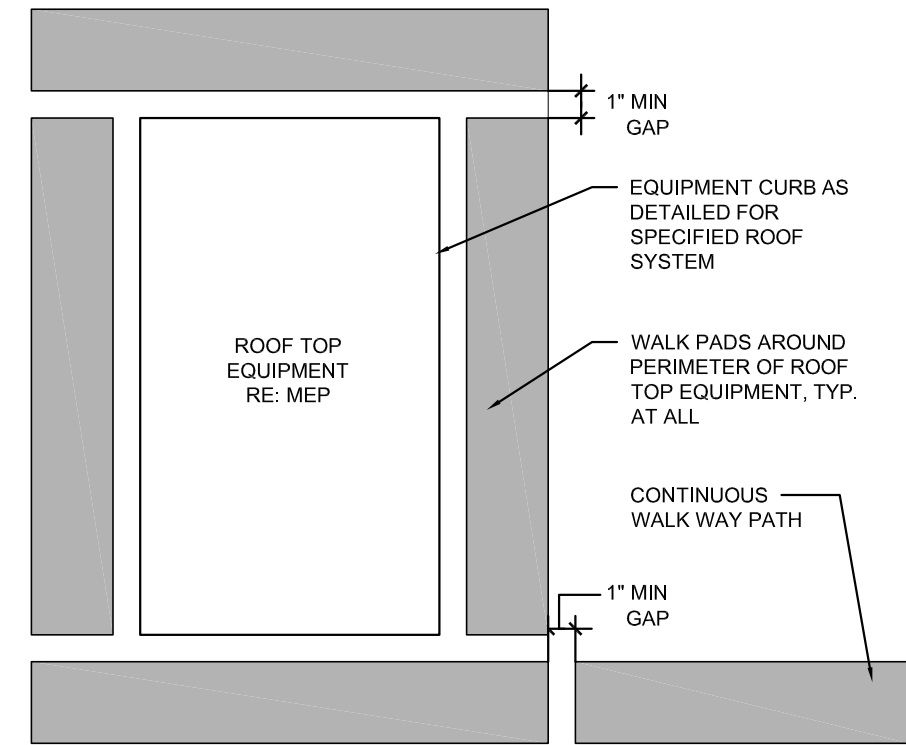


DATE: 07/28/21
DRAWN BY: CFH
REVISED: TD

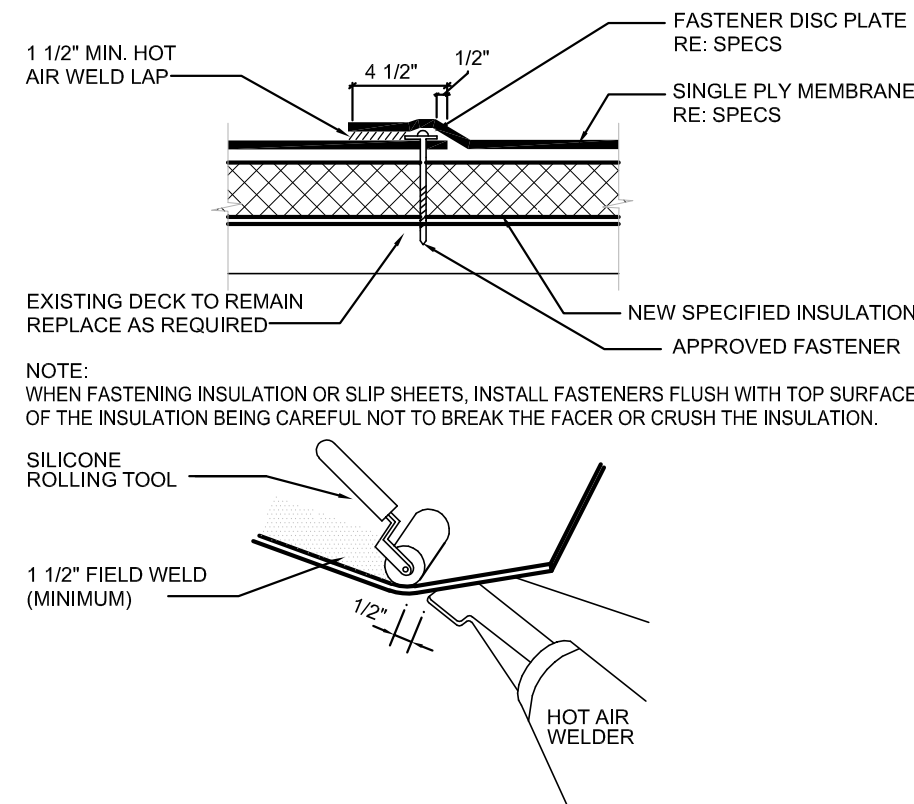
PROJECT NO.: 20333R & 20334R
DESCRIPTION: ISSUED FOR COMPETITIVE SEALED BID

SKETCH NO.

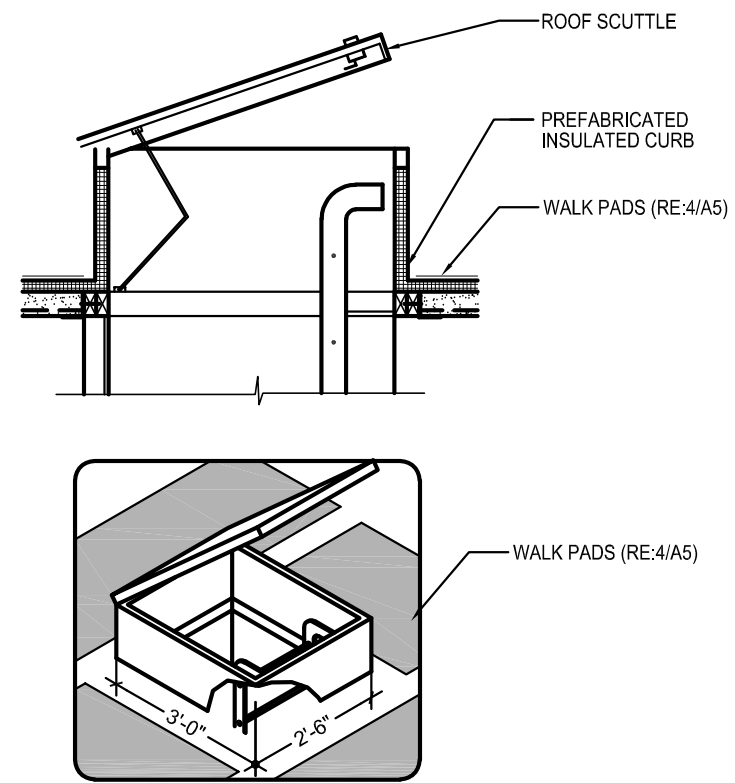
A5



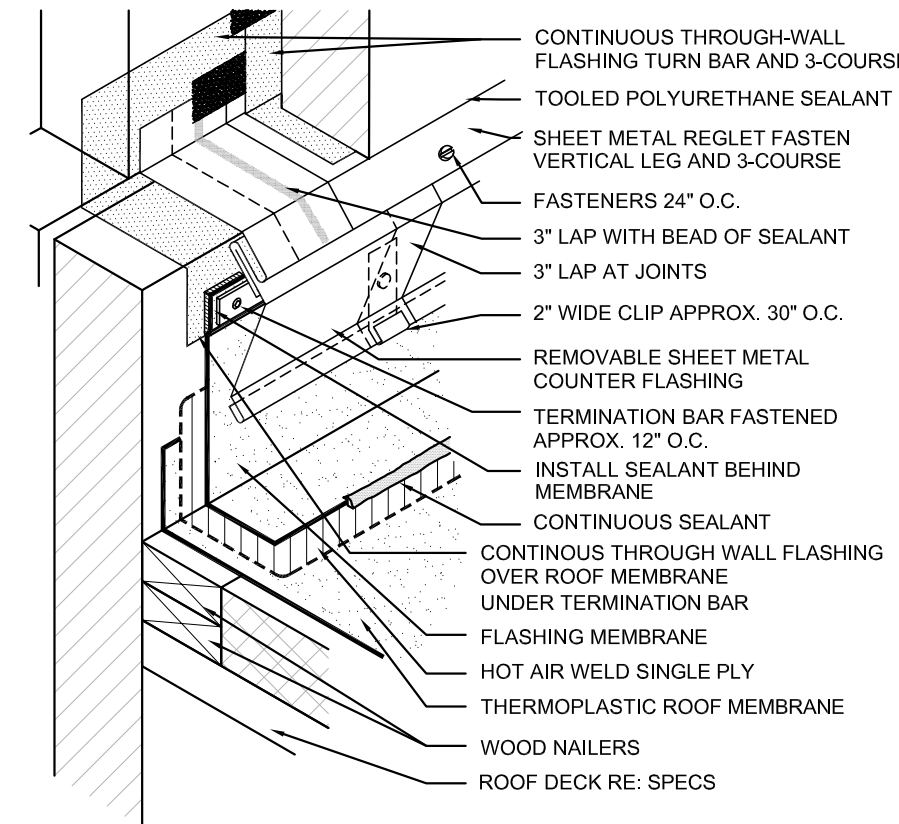
4 WALK PADS
NOT TO SCALE



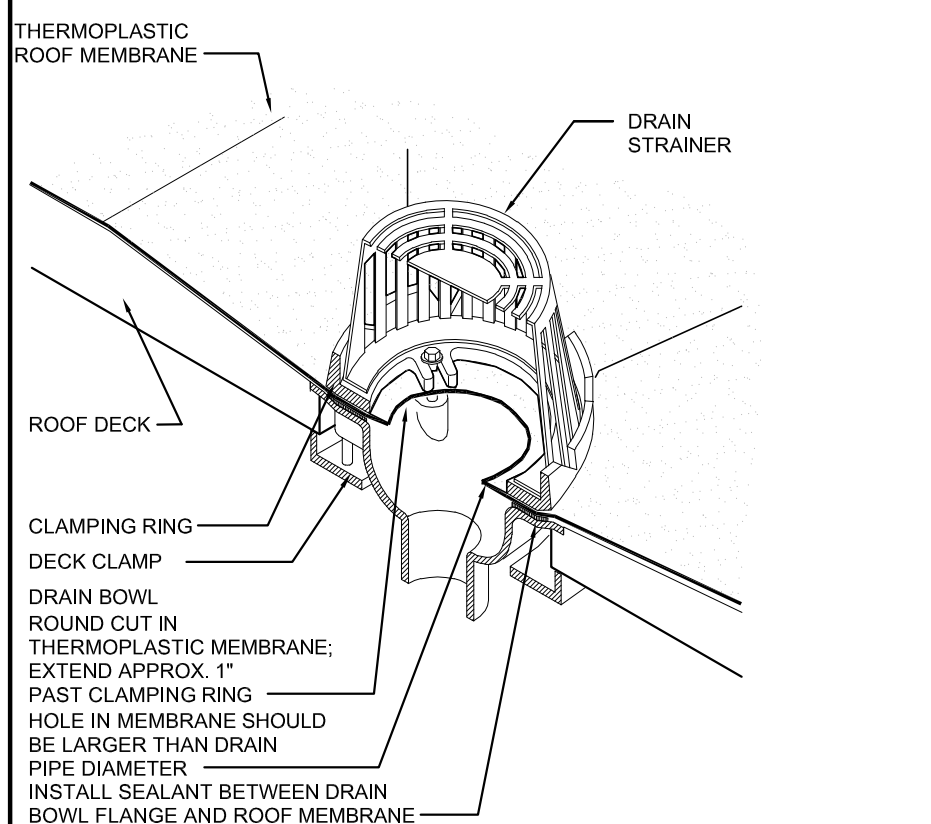
5 MEMBRANE LAP
NOT TO SCALE



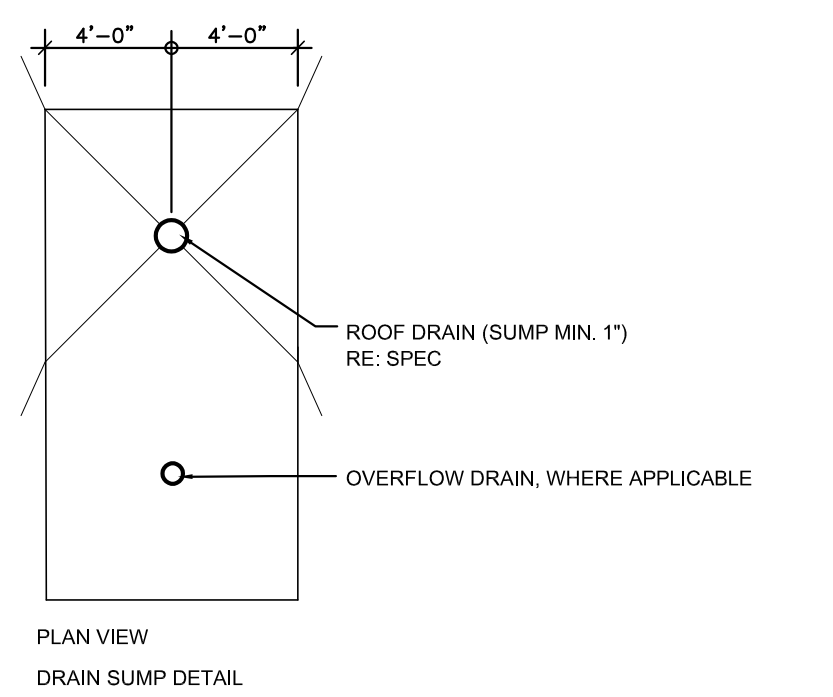
6 E ROOF HATCH
NOT TO SCALE



1 BASE DETAIL
NOT TO SCALE



2 ROOF DRAIN
NOT TO SCALE



3 OVERFLOW
NOT TO SCALE

PAYMENT BOND

BOND NO. _____

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the County of Yolo, State of California, ("Owner") has awarded to _____ ("Contractor/Principal") a contract (County Agreement No. _____, dated _____, 2021, referred to as the "Agreement") for the work described as _____. The Agreement is incorporated by this reference into this Payment Bond ("Bond"); and

WHEREAS, Contractor/Principal is required to furnish a bond in connection with the Agreement and pursuant to California Civil Code section 9550;

NOW, THEREFORE, we, _____ the undersigned Contractor/Principal, and _____, ("Surety"), a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the County of Yolo, and to any and all persons, companies, or corporations entitled by law to file stop payment notices under California Civil Code Section 9100, or any person, company, or corporation entitled to make a claim on this bond, in the sum of _____ DOLLARS (\$ _____), which such sum being not less than one hundred percent (100%) of the total amount payable by the Owner under the terms of the Agreement, for which payment will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Contractor/Principal, its heirs, executors, administrators, successors, or assigns, or subcontractor, shall fail to pay any person or persons named in Civil Code section 9100; or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind; or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code Section 13020 with respect to work and labor thereon of any kind, then Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code Section 9550 et seq.

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, or specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described; or pertaining or relating to the furnishing of labor, materials, or equipment therefor; nor by any change or modification of any terms of payment or extension of time for payment pertaining or relating to any scheme or work of improvement herein above described; nor by any rescission or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or

under the bond; nor by any fraud practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given; and under no circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Owner and Contractor/Principal or on the part of any obligee named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code section 9100, and who has not been paid the full amount of his or her claim; and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned, including but not limited to the provisions of sections 2819 and 2845 of the California Civil Code.

Any notice to Surety may be given in the manner specified in the Agreement and delivered or transmitted to Surety as follows:

Attn: _____
Address: _____
City/State/Zip: _____
Phone: _____
Fax: _____
Email: _____

IN WITNESS WHEREOF, two identical counterparts of this Bond, each of which shall for all purposes be deemed an original thereof, have been duly executed by Contractor/Principal and Surety above named, on the ____ day of _____, 202__.

Contractor/Principal (SEAL)

By: _____
Contractor/'s Representative

Contractor/Principal's Address

City, State, Zip

(SEAL)

Surety
By: _____
Surety's Representative

Surety's Address

City, State, Zip

Telephone Number

NOTE: Signatures of those executing for Surety must be properly acknowledged. The bond must be accompanied by a properly acknowledged Power of Attorney from the Surety authorizing its agent to bind it to this bond. A copy of such Power of Attorney must be on file with the Yolo County Clerk.

Notary 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 _____

On _____, 21____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")

appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

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.

Place Notary Seal Above Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
- Corporate Officer

Title(s)	
<input type="checkbox"/> Partner(s) <input type="checkbox"/> Limited <input type="checkbox"/> General	
<input type="checkbox"/> Attorney-In-Fact	
<input type="checkbox"/> Trustee(s)	
<input type="checkbox"/> Guardian/Conservator	
<input type="checkbox"/> Other:	
Signer is representing: Name Of Person(s) Or Entity(ies)	

Title or Type of Document
Number of Pages
Date of Document
Signer(s) Other Than Named Above

Notary 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 _____

On _____, 21____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")

appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

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.

Place Notary Seal Above Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
- Corporate Officer

Title(s)	Title or Type of Document
<input type="checkbox"/> Partner(s) <input type="checkbox"/> Limited <input type="checkbox"/> General	Number of Pages
<input type="checkbox"/> Attorney-In-Fact <input type="checkbox"/> Trustee(s) <input type="checkbox"/> Guardian/Conservator	Date of Document
<input type="checkbox"/> Other: Signer is representing: Name Of Person(s) Or Entity(ies)	Signer(s) Other Than Named Above

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the County of Yolo, organized and operating under the laws of the State of California, (hereinafter referred to as the “County”) has awarded to _____, (hereinafter referred to as the “Contractor”) an agreement for **Contract No.** _____, (hereinafter referred to as the “Project”).

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract for the Project dated _____, (hereinafter referred to as “Contract Documents”), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the County in the sum of _____ DOLLARS, (\$ _____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one (1) year guarantee of all materials and workmanship; and shall indemnify and save harmless the County, its officials, officers, employees, and authorized volunteers, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorney’s fees, incurred by the County in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by the County, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the County from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long

as any obligation of Contractor remains. Nothing herein shall limit the County's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the County to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the County's option:

Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or

Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder, the Surety and the County, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the County under the Contract and any modification thereto, less any amount previously paid by the County to the Contractor and any other set offs pursuant to the Contract Documents.

Permit the County to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the County under the Contract and any modification thereto, less any amount previously paid by the County to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the County may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the County, when declaring the Contractor in default, notifies Surety of the County's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 21__.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

The rate of premium on this bond is _____ per thousand. The total amount of premium charges is \$ _____.
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or Representative for service of process in California, if different from above)

(Telephone number of Surety and Agent or Representative for service of process in California)

PAYMENT BOND

BOND NO. _____

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the County of Yolo, State of California, ("Owner") has awarded to _____ ("Contractor/Principal") a contract (County Agreement No. _____, dated _____, 2021, referred to as the "Agreement") for the work described as _____. The Agreement is incorporated by this reference into this Payment Bond ("Bond"); and

WHEREAS, Contractor/Principal is required to furnish a bond in connection with the Agreement and pursuant to California Civil Code section 9550;

NOW, THEREFORE, we, _____ the undersigned Contractor/Principal, and _____, ("Surety"), a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the County of Yolo, and to any and all persons, companies, or corporations entitled by law to file stop payment notices under California Civil Code Section 9100, or any person, company, or corporation entitled to make a claim on this bond, in the sum of

_____ DOLLARS (\$ _____), which such sum being not less than one hundred percent (100%) of the total amount payable by the Owner under the terms of the Agreement, for which payment will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Contractor/Principal, its heirs, executors, administrators, successors, or assigns, or subcontractor, shall fail to pay any person or persons named in Civil Code section 9100; or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind; or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code Section 13020 with respect to work and labor thereon of any kind, then Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code Section 9550 et seq.

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, or specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described; or pertaining or relating to the furnishing of labor, materials, or equipment therefor; nor by any change or modification of any terms of payment or extension of time for payment pertaining or relating to any scheme or work of improvement herein above described; nor by any rescission or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or

under the bond; nor by any fraud practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given; and under no circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Owner and Contractor/Principal or on the part of any obligee named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code section 9100, and who has not been paid the full amount of his or her claim; and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned, including but not limited to the provisions of sections 2819 and 2845 of the California Civil Code.

Any notice to Surety may be given in the manner specified in the Agreement and delivered or transmitted to Surety as follows:

Attn: _____
Address: _____
City/State/Zip: _____
Phone: _____
Fax: _____
Email: _____

IN WITNESS WHEREOF, two identical counterparts of this Bond, each of which shall for all purposes be deemed an original thereof, have been duly executed by Contractor/Principal and Surety above named, on the ____ day of _____, 202__.

Contractor/Principal (SEAL)

By: _____
Contractor/'s Representative

Contractor/Principal's Address

City, State, Zip

Surety (SEAL)

By: _____
Surety's Representative

Surety's Address

City, State, Zip

Telephone Number

NOTE: Signatures of those executing for Surety must be properly acknowledged. The bond must be accompanied by a properly acknowledged Power of Attorney from the Surety authorizing its agent to bind it to this bond. A copy of such Power of Attorney must be on file with the Yolo County Clerk.

Notary 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 _____

On _____, 21____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")

appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

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.

Place Notary Seal Above Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
- Corporate Officer

Title(s)	Title or Type of Document
<input type="checkbox"/> Partner(s) <input type="checkbox"/> Limited <input type="checkbox"/> General	Number of Pages
<input type="checkbox"/> Attorney-In-Fact <input type="checkbox"/> Trustee(s) <input type="checkbox"/> Guardian/Conservator	Date of Document
<input type="checkbox"/> Other: Signer is representing: Name Of Person(s) Or Entity(ies)	Signer(s) Other Than Named Above

Notary 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 _____

On _____, 21____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")

appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

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.

Place Notary Seal Above Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
- Corporate Officer

Title(s)	Title or Type of Document
<input type="checkbox"/> Partner(s) <input type="checkbox"/> Limited <input type="checkbox"/> General <input type="checkbox"/> Attorney-In-Fact <input type="checkbox"/> Trustee(s) <input type="checkbox"/> Guardian/Conservator <input type="checkbox"/> Other:	Number of Pages
Signer is representing: Name Of Person(s) Or Entity(ies)	Date of Document
	Signer(s) Other Than Named Above

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the County of Yolo, organized and operating under the laws of the State of California, (hereinafter referred to as the “County”) has awarded to _____, (hereinafter referred to as the “Contractor”) an agreement for **Contract No.** _____, (hereinafter referred to as the “Project”).

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract for the Project dated _____, (hereinafter referred to as “Contract Documents”), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the County in the sum of _____ DOLLARS, (\$ _____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one (1) year guarantee of all materials and workmanship; and shall indemnify and save harmless the County, its officials, officers, employees, and authorized volunteers, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorney’s fees, incurred by the County in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by the County, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the County from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long

as any obligation of Contractor remains. Nothing herein shall limit the County's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the County to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the County's option:

Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or

Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder, the Surety and the County, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the County under the Contract and any modification thereto, less any amount previously paid by the County to the Contractor and any other set offs pursuant to the Contract Documents.

Permit the County to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the County under the Contract and any modification thereto, less any amount previously paid by the County to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the County may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the County, when declaring the Contractor in default, notifies Surety of the County's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 21__.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

The rate of premium on this bond is _____ per thousand. The total amount of premium charges is \$ _____.
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or Representative for service of process in California, if different from above)

(Telephone number of Surety and Agent or Representative for service of process in California)

Notary 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 _____

On _____, 21____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")

appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

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.

Place Notary Seal Above Signature of Notary Public

OPTIONAL

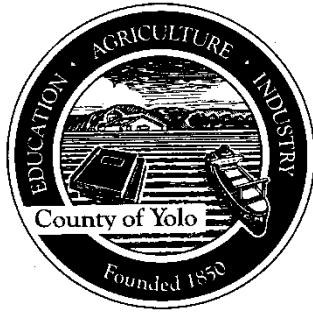
Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
- Corporate Officer

Title(s)	Title or Type of Document
<input type="checkbox"/> Partner(s) <input type="checkbox"/> Limited <input type="checkbox"/> General	Number of Pages
<input type="checkbox"/> Attorney-In-Fact <input type="checkbox"/> Trustee(s) <input type="checkbox"/> Guardian/Conservator	Date of Document
<input type="checkbox"/> Other: Signer is representing: Name Of Person(s) Or Entity(ies)	Signer(s) Other Than Named Above



COUNTY OF YOLO

**YOLO COUNTY DEPARTMENT OF FINANCE
PROCUREMENT DIVISION
625 COURT STREET, SUITE 103
WOODLAND, CA 95695
(530) 666-8073**

PLANS AND SPECIFICATIONS

FOR

**SHERIFF'S ADMIN/MORGUE ROOF
PROJECT**

**2500 E. GIBSON ROAD
WOODLAND, CA 95776**

July 29, 2021

**Karen Kawelmacher
(530) 666-8073
e-mail: karen.kawelmacher@yolocounty.org**

**BID RECEIVED NO LATER THAN: AUGUST 31ST, 2021 AT 10:00 AM
YOLO COUNTY ADMINISTRATION BUILDING
625 COURT STREET, ROOM 103
WOODLAND, CA 95695**

**BID OPENING TO FOLLOW AT: AUGUST 31ST, 2021 AT 10:06 AM
YOLO COUNTY ADMINISTRATION BUILDING
625 COURT STREET, CAO CONFERENCE ROOM # 203
WOODLAND, CA 95695**

Table of Contents

Notice To Contractors.....	7
PART 1 – GENERAL PROVISIONS OF THE CONSTRUCTION CONTRACT.....	12
SECTION 1 - DEFINITIONS AND TERMS	12
1-1 GENERAL.....	12
1-2 ABBREVIATIONS.....	12
1-3 DEFINITIONS	13
SECTION 2 - PROPOSAL REQUIREMENTS AND CONDITIONS	20
2-1 APPROXIMATE ESTIMATE.....	20
2-2 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK.....	21
2-3 BIDDER'S PROPOSAL.....	22
2-4 REJECTION OF PROPOSALS.....	23
2-5 PROPOSAL GUARANTY	23
2-6 WITHDRAWAL OF PROPOSALS	23
2-7 PUBLIC OPENING OF PROPOSALS.....	23
2-8 BIDDER'S STATEMENT OF FINANCIAL RESPONSIBILITY, TECHNICAL ABILITY, AND EXPERIENCE	24
2-9 BIDDER'S STATEMENT OF SUBCONTRACTORS.....	24
2-10 ADDENDA.....	25
2-11 PROTESTS.....	25
SECTION 3 - AWARD AND EXECUTION OF CONTRACT.....	27
3-1 AWARD OF CONTRACT	27
3-2 EXECUTION OF CONTRACT	27
3-3 CONTRACT BONDS.....	27
3-4 FAILURE TO EXECUTE CONTRACT.....	28
3-5 RETURN OF PROPOSAL GUARANTIES.....	28
3-6 CONTRACTOR'S GUARANTY.....	28
3-7 PRE-CONSTRUCTION CONFERENCE.....	29
SECTION 4 - SCOPE OF WORK AND CHANGES	30
4-1 INTENT OF PLANS AND SPECIFICATIONS.....	30
4-2 CONFORMANCE WITH CODES AND STANDARDS.....	30

4-3	CHANGES AND EXTRA WORK	30
4-4	FORCE ACCOUNT PAYMENT.....	35
4-5	PROCEDURE FOR RESOLVING CLAIMS	40
SECTION 5 - RESPONSIBILITIES OF THE CONTRACTOR.....		45
5-1	SUPERVISION AND SUPERINTENDENCE	45
5-2	LABOR, MATERIALS AND EQUIPMENT	45
5-3	DISMISSAL OF UNSATISFACTORY EMPLOYEES.....	46
5-4	SUBCONTRACTING AND ASSIGNMENT	46
5-5	THIRD PARTY CLAIMS	47
5-6	ASSIGNMENT OF ANTITRUST ACTIONS	47
5-7	CONTRACTOR'S SUBMITTALS	47
5-8	SURVEYS, LINES, AND GRADES	49
5-9	RECORD DOCUMENTS	50
5-10	WEEKLY JOB MEETINGS.....	51
5-11	USE OF PREMISES	51
5-12	WATER	53
5-13	DUST CONTROL.....	53
5-14	TRAFFIC CONTROL	53
5-15	DIFFERING SITE CONDITIONS	54
5-16	QUALITY CONTROL	54
5-17	STORM WATER POLLUTION PREVENTION	55
5-18	AIR POLLUTION CONTROL	56
5-19	OTHER OBLIGATIONS AND RESPONSIBILITIES.....	56
SECTION 6 - CONTROL OF WORK, INSPECTIONS AND ACCEPTANCE OF WORK		57
6-1	AUTHORITY OF THE ENGINEER.....	57
6-2	PLANS AND SHOP DRAWINGS	57
6-3	CONFORMITY WITH CONTRACT DOCUMENTS AND ALLOWABLE DEVIATIONS.....	57
6-4	COORDINATION AND INTERPRETATION OF PLANS, STANDARD SPECIFICATIONS, AND TECHNICAL PROVISIONS	58
6-5	ORDER OF WORK	59
6-6	INSPECTION	59
6-7	SUGGESTIONS TO CONTRACTOR ADOPTED AT OWN RISK	60

6-8	REMOVAL OF REJECTED AND UNAUTHORIZED WORK	60
6-9	FINAL INSPECTION, FIELD ACCEPTANCE, AND ACCEPTANCE BY THE BOARD	60
6-10	CONTRACTOR'S GUARANTY.....	66
SECTION 7 - CONTROL OF MATERIALS		62
7-1	SOURCE OF SUPPLY AND QUALITY OF MATERIALS	62
7-2	COUNTY FURNISHED MATERIALS	63
7-3	STORAGE OF MATERIALS.....	63
7-4	DEFECTIVE MATERIALS	63
7-5	TRADE NAMES AND ALTERNATIVES	63
7-6	PLANT INSPECTION	64
7-7	CERTIFICATES OF COMPLIANCE.....	64
7-8	TESTING	65
SECTION 8 - LEGAL RELATIONS AND RESPONSIBILITY.....		67
8-1	LAWS TO BE OBSERVED	67
8-2	PAYMENT OF TAXES.....	72
8-3	PERMITS AND LICENSES.....	72
8-4	PATENTS.....	72
8-5	SAFETY AND HEALTH PROVISIONS	73
8-6	PUBLIC CONVENIENCE	74
8-7	PUBLIC SAFETY	75
8-8	USE OF EXPLOSIVES	76
8-9	PRESERVATION OF PROPERTY	76
8-10	RESPONSIBILITY FOR DAMAGE.....	77
8-11	INSURANCE REQUIREMENTS.....	78
8-12	LEGAL ACTIONS AGAINST THE COUNTY	79
8-13	DISPOSAL OF MATERIAL	79
8-14	COOPERATION	79
8-15	RELIEF FROM MAINTENANCE AND RESPONSIBILITY	80
8-16	CONTRACTOR'S RESPONSIBILITY FOR THE WORK AND MATERIALS	80
8-17	PROPERTY RIGHTS IN MATERIALS	81
8-18	PERSONAL LIABILITY	81
SECTION 9 - PROSECUTION AND PROGRESS.....		82

9-1	BEGINNING OF WORK.....	82
9-2	PROGRESS SCHEDULE	82
9-3	TEMPORARY SUSPENSION OF WORK.....	83
9-4	TIME OF COMPLETION	84
9-5	LIQUIDATED DAMAGES	85
9-6	TERMINATION OF CONTROL	87
9-7	RIGHT-OF-WAY DELAYS	88
9-8	TERMINATION OF CONTRACT	88
9-9	COUNTY'S RIGHT TO TAKE POSSESSION OF THE WORK IN WHOLE OR IN PART	91
SECTION 10 - MEASUREMENT AND PAYMENT		92
10-1	MEASUREMENT OF QUANTITIES.....	92
10-2	SCOPE OF PAYMENT	93
10-3	RESERVED	93
10-4	RESERVED	93
10-5	RESERVED	93
10-6	STOP NOTICES.....	93
10-7	PARTIAL PAYMENTS.....	94
10-8	SUBSTITUTION OF SECURITIES FOR WITHHELD MONEY	95
10-9	PAYMENT AFTER ACCEPTANCE	96
10-10	CLERICAL ERRORS.....	97
PART 2 - SPECIAL PROVISIONS		98
SECTION 11 - SPECIAL PROVISIONS.....		98
11-1	PROJECT	98
11-2	PROJECT LOCATION AND ACCESS.....	98
11-3	DEFINITIONS	99
11-4	SUBMISSION OF BIDS AND AWARD OF CONTRACT	99
11-5	PROSECUTION AND PROGRESS	99
11-6	ORDER OF WORK	100
11-7	LABOR SURCHARGE	100
11-8	PROGRESS SCHEDULE	101
11-9	SURVEYS, LINES, AND GRADES	101
11-10	SITE FACILITIES	102

11-11	SITE UTILITIES.....	102
11-12	DUST CONTROL.....	102
11-13	TRAFFIC CONTROL.....	103
11-14	EXISTING IMPROVEMENTS	103
11-15	DIFFERING SITE CONDITIONS.....	104
11-16	RECORD DOCUMENTATION	104
11-17	QUALITY CONTROL.....	104
11-18	ACCESS TO WORK BY OTHER AGENCIES	104
11-19	DIVERSION AND CONTROL OF WATER	104
11-20	COORDINATION OF WORK.....	104
11-21	PAYMENT RETENTION.....	105
11-22	PROJECT FUNDING.....	105
11-23	TERM AND TERMINATION	105
11-24	SOLE SOURCE	106
PART 3 - TECHNICAL PROVISIONS.....		107
PART 4 - PROPOSAL AND CONTRACT.....		108
PART 5 - PROJECT DRAWINGS		109
PART 6 - CONSTRUCTION QUALITY ASSURANCE PLAN.....		110

County of Yolo

State of California

Department of General Services

Division of Facilities

Notice To Contractors

Sealed proposals for the Fleet/Roads Roof project to be entitled:

SHERIFF'S ADMIN/MORGUE ROOF PROJECT

Shall be submitted by hard copy at the Yolo County Department of Financial Services, 625 Court Street, Room 103, Woodland, CA 95695 no later than: **Tuesday, August 31st, 2021 at 10:00 am** at which time they will be publicly opened and read in the Yolo County Administration Building at 625 Court St. Atrium Training Room, Woodland, CA 95695 at 10:06am.

There will be a mandatory pre-bid meeting on **Tuesday, August 17th, 2021 at 9:00 am** at Sheriff's Admin Building, 2500 E. Gibson Road, Woodland, CA 95766 or 140 Tony Diaz Drive. It is the same building location.

General work description:

Contractor to remove and properly dispose of existing roofing system down to roof deck in designated areas on roof plans which is approximately 200 square feet. Contractor shall also remove all existing wall, curb flashings and existing walking pads as well as remove / replace existing roof deck in areas that show evidence of dry rot and infill area to match existing roof elevation. Work shall include cleaning and prepping existing substrate to receive new substrate and mechanically attaching ¼" Recovery Board, fully adhering new specified 60 mil PVC roof membrane with new associated sheet metals, new receiver/removable counter flashings at base of metal parapet walls roof area A1, new coping caps, trim, and expansion joints metal. Existing electrical/gas/condensate lines are to be installed at new roof elevations on specified pipe supports if new existing line needs to be raised to properly fit new support height minimum 6" with protection pads. Contractor to remove and properly dispose of existing T-111 siding at vertical parapet walls at area B1 of the County Morgue and install new 36" wide R paneling with non-concealed fasteners as per manufacturers specifications.

Alternate "A" Proposal: County Morgue

Contractor to remove and properly dispose of existing T-111 siding at vertical parapet walls and install new 16" wide meridian paneling with concealed fasteners as per manufacturers specifications.

Alternate “B” Proposal:

Contractor to give a price per square foot to remove and install ¾” plywood substrate if needed. Base bid includes 200 square feet already. This is in case there is unforeseen water damage.

Normal operating hours are Monday through Saturday 6:30 a.m. to 4:00 p.m., and Sunday 8:00 a.m. to 4:00 p.m. The work to be performed under this contract consists of furnishing all equipment, materials, and tools; performing all required labor; and completing all work necessary for the construction of the following:

Item No.	Description	Quantity Pricing	Individual Line-Item Pricing
1	BASE Proposal - Sheriff’s Admin/Morgue Roof Project Bidder acknowledges and agrees that the Base Bid accounts for any and all Allowance(s), Total Cost based on Scope of Work and all bid documents	Lump Sum	
2	ADD Alternate “A” – Replacing T-111 siding on Morgue Roof with 16” wide Meridian paneling	Lump Sum	
3	ADD Alternate “B” – Remove and install ¾” plywood substrate. Base bid includes 200 Sq. Ft. but need amount if more is required	Sq. Ft.	

(1) The Section Reference corresponds with the Section number within the Technical Provisions where the measurement and payment is described.

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the County does not expressly or by implication agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of work, or to omit portions of work, as may be deemed necessary or advisable by the ENGINEER.

Bidder shall possess a valid B License and/or C39 license and DIR number in order to submit a bid. If necessary, subcontractor's may be used to meet the license requirements necessary to complete the project in accordance with Business and Professions Code section 7059(b). The bidder must be properly licensed from the time it submits its bid through contract acceptance in accordance with Business and Professions Code section 7000 et seq.

Proposals are required for the entire work described herein. The County reserves the right to reject any or all proposals or to waive any irregularities or informalities in any proposals or in the proposal process.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code section 12990.

Project plans, specifications, special provisions, proposal forms, and addenda for this project can be downloaded at no cost at www.bidsync.com. It is the bidder's responsibility to register at www.bidsync.com to ensure notification of all addenda. It is the bidder's responsibility to arrange for printing services to obtain printed copies of the bid documents.

Pursuant to Labor Code section 1725.5 and 1771.3, contractors and subcontractors who intend to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No proposal will be accepted, nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1. Information is available at: <http://www.dir.ca.gov/Public-Works/PublicWorks.html>. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this project, it shall be the bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its proposal.

The contract documents may be examined at the office of the Yolo County Clerk of the Board.

Questions must be submitted in writing through www.bidsync.com by **Friday August 20, 2021** at 10:00 am. Answers will be posted on www.bidsync.com by **Wednesday August 25, 2021**. **Every answer will constitute a modification to the Specifications.**

Inquiries or questions based on alleged patent ambiguity of the plans, specifications or estimate must be communicated as a bidder inquiry prior to bid opening. Any such inquiries or questions, submitted after bid opening, will not be treated as a bid protest.

The successful bidder shall furnish a payment bond and a performance bond, each in the full amount of the contract price. These bonds shall be executed by a surety specified in California Code of Civil Procedure Section 995.310.

The County affirms that in any contract entered into pursuant to this advertisement, all bidders will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wage rates are set forth in the General Prevailing Wage Rates for this project, available for review at Yolo County Administration Building – County Administrator’s Office, 625 Court Street, Suite 202, Woodland, California and available from the California Department of Industrial Relations’ internet web site at <http://www.dir.ca.gov/DLSR/PWD>. Future effective general prevailing wage rates which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the General Prevailing Wage Rate Determinations. The successful bidder shall post a copy of the prevailing wage rates at each job site. It shall be mandatory upon the bidder to whom the contract is awarded, and upon any subcontractors, to comply with all Labor Code provisions, which include but are not limited to the payment of not less than the said specified prevailing wage rates to all workers employed by them in the execution of the contract, employment of apprentices, hours of labor and debarment of contractors and subcontractors.

Pursuant to Labor Code section 1725.5 and 1771.3, contractors and subcontractors who intend to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No proposal will be accepted nor any contract entered into without proof of the contractor’s and subcontractors’ current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1. Information is available at: <http://www.dir.ca.gov/Public-Works/PublicWorks.html>. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this project, it shall be the bidder’s sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its proposal.

No proposal will be received unless it is made on a proposal form furnished by the County, either by a hard copy or downloaded from the aforementioned bid exchanges or www.bidsync.com. Copies

or facsimiles of the bidder's completed and executed proposal forms submitted as a proposal will be rejected. Each proposal must be accompanied by a certified check, cashier's check, or bidder's bond made payable to Yolo County for an amount equal to at least ten percent (10%) of the amount of proposal, such guaranty to be forfeited should the bidder to whom the contract is awarded fail to enter into the contract. If a bond is used, it must be signed by the bidder and by a signatory of an authorized surety company all as provided by law.

Pursuant to Public Contract Code section 22300, the successful bidder may substitute certain securities for funds withheld by the County to ensure its performance under the contract.

The engineers estimate for this project is \$250,000.00.

90 working days are allowed for completion of the work.

Dated this _____ day of _____ 2021.

Kevin Yarris,
Director of General Services,
General Services Department

By: _____

PART 1 – GENERAL PROVISIONS **OF THE CONSTRUCTION** **CONTRACT**

SECTION 1 - DEFINITIONS AND TERMS

1-1 GENERAL

Whenever the following terms, titles, or abbreviations are used in these SPECIFICATIONS, or in any document or instrument where these SPECIFICATIONS govern, the intent and meaning shall be as herein defined.

Working titles have a masculine gender, such as "workman" and "journeyman" and the pronoun "he," are utilized in the SPECIFICATIONS for the sake of brevity, and are intended to refer to persons of either sex.

1-2 ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
APA	American Plywood Association
APWA	American Public Works Association
ASA	American Standards Association
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing Materials
AWS	American Welding Society
AWWA	American Water Works Association
CSI	Construction Specifications Institute
FS	Federal Specifications
NBFU	National Board of Fire Underwriters
NEC	National Electrical Code
NEMA	National Electrical Manufacturer's Association
NFPA	National Fire Protection Association
NSF	National Sanitation Foundation
OSHA	Occupational Safety & Health Act

Title 19	Title 19 (Public Safety) of the California Administrative Code
Title 24	Title 24 (Building Standards) of the California Administrative Code
UL	Underwriters' Laboratories, Inc.
UBC	Uniform Building Code
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code

All references to the Specifications, standards, or other publications of any of the above are understood to refer to the current issue as revised or amended at the date of receipt of bids.

CF	Cubic Foot
CY	Cubic Yard
EA	Each
GAL	Gallon
LB	Pound
LF	Lineal Foot
LS	Lump Sum
MH	Man Hours
MI	Mile
SQFT	Square Foot
SQYD	Square Yard
STA	Station

1-3 DEFINITIONS

ADDENDA - Written or graphic Instruments issued prior to the opening of PROPOSALS which clarify, correct, or change the bidding documents or the CONTRACT DOCUMENTS.

AGREEMENT OR CONTRACT - The written agreement between the COUNTY and CONTRACTOR covering the WORK to be performed: Other CONTRACT DOCUMENTS are incorporated into the AGREEMENT and made a part thereof as provided therein.

AS SHOWN, ETC. - Where "as shown;" "as indicated," "as detailed," or words of similar import are used, it shall be understood that reference is made to the PROJECT DRAWINGS unless specifically stated otherwise. Where "as directed," "as permitted," "approved," or words of similar import are used, it shall be understood that the direction, permission, requirements, or acceptance of the ENGINEER is intended unless stated otherwise.

BASE - A layer of specified material of planned thickness placed immediately below the pavement or surfacing.

BASEMENT MATERIAL - The material in excavation or embankments underlying the lowest layer of subbase, base, pavement, surfacing or other specified layer which is to be placed.

BID AND BID FORM means PROPOSAL.

BIDDER - Any person, partnership, firm, or corporation submitting a PROPOSAL for the WORK contemplated, acting directly or through a duly authorized representative.

BOARD OF SUPERVISORS - Governing body of the COUNTY.

BONDS - Bid, performance, and payment bonds and other instruments of security.

CALENDAR DAY - Every day shown on the calendar, Sundays and holidays included. When the time for completion in the CONTRACT is set forth in CALENDAR DAYS or DAYS, each and every reference to WORKING DAYS in these CONTRACT DOCUMENTS shall be deemed to mean CALENDAR DAYS, unless specified otherwise.

CALTRANS - Department of Transportation, State of California.

CHIEF ENGINEER - Whenever the words "Chief Engineer" is used in the "State Specifications," they shall mean the Director of Community Services Department of the County of Yolo.

CONDUIT - A pipe or tube in which smaller pipes, tubes, or electrical conductors are inserted or are to be inserted.

CONSTRUCTION QUALITY ASSURANCE (CQA) INSPECTOR - The person or corporation responsible for observing and documenting activities related to quality assurance of WORK outlined in these CONTRACT DOCUMENTS, in accordance with the CQA Plan (defined below).

CONSTRUCTION QUALITY ASSURANCE PLAN (CQA PLAN) - Selected tests and observations made by an independent CONSTRUCTION QUALITY ASSURANCE (CQA) INSPECTOR to assure that the WORK, including the final product, complies with applicable regulations, standards, and CONTRACT DOCUMENTS. The CQA INSPECTOR shall perform under a separate contract with the COUNTY.

CONSULTING ENGINEER/ARCHITECT - Any person or persons, firm, partnership, or corporation legally authorized and licensed to practice Civil Engineering or Architecture in the State of California who prepares PLANS and SPECIFICATIONS for the DEPARTMENT, for approval.

CONTRACT DOCUMENTS - The CONTRACT DOCUMENTS shall include: The Notice to Contractors, all duly issued ADDENDA, PROPOSAL, PLANS, TECHNICAL PROVISIONS, AGREEMENT, BONDS, and STANDARD SPECIFICATIONS, including GENERAL PROVISIONS, SPECIAL PROVISIONS, STANDARD CONSTRUCTION SPECIFICATIONS and STANDARD DRAWINGS contained therein; also, any and all supplemental agreements amending or extending the WORK contemplated and which may be required to complete the WORK in a substantial and acceptable manner. Supplemental agreements are written agreements covering alterations, amendments or extensions to the CONTRACT and include CONTRACT CHANGE ORDERS.

CONTRACT CHANGE ORDERS - A supplemental written agreement which authorizes an addition, deletion or revision in the WORK, or an adjustment in the CONTRACT PRICE or the CONTRACT TIME, issued on or after the effective date of the AGREEMENT.

CONTRACT PRICE - The moneys payable by the COUNTY to the CONTRACTOR as stated in the AGREEMENT, as full compensation for the WORK, subject to any additions or deductions as provided in the CONTRACT DOCUMENTS, including all applicable taxes and cost.

CONTRACT TIME - The number of days or the date stated in the CONTRACT DOCUMENTS for the completion of the WORK, as may be adjusted by a CONTRACT CHANGE ORDER.

CONTRACTOR - The person, firm, or corporation with whom the COUNTY entered into the AGREEMENT.

CONTRACTOR'S REPRESENTATIVE OR SUPERINTENDENT - CONTRACTOR's representative at the site, who has authority to act on behalf of CONTRACTOR.

COUNTY - The County of Yolo, a public entity, existing under and by virtue of the laws of the State of California.

DAYS - Shall mean consecutive calendar days unless otherwise specified.

DEFECTIVE - An adjective which, when modifying the word WORK, refers to work that is unsatisfactory, faulty or deficient, or does not conform to the CONTRACT DOCUMENTS, or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the CONTRACT DOCUMENTS, or has been damaged prior to the date of ENGINEER's FIELD ACCEPTANCE LETTER.

DEPARTMENT- The Department of Community Services, Division of Integrated Waste Management, County of Yolo.

DESIGN ENGINEER or ARCHITECT - The engineer, architect, or firm engaged as an independent contractor by the COUNTY to design the PROJECT.

The authority of the DESIGN ENGINEER or ARCHITECT to monitor and review the WORK for the ENGINEER shall be strictly limited to that authority specified, and no additional authority has been granted, nor shall be inferred.

DETOUR - A temporary route for traffic around a closed portion of the road.

DIRECTOR - The Director of Community Services of Yolo County acting either directly or through the Chiefs of the appropriate Divisions of the Department or their authorized representatives.

DIVIDED HIGHWAY - A highway with separated traveled ways for traffic, generally in opposite directions.

DRAWINGS - See PLANS.

EFFECTIVE DATE OF THE AGREEMENT - The date indicated in the AGREEMENT on which it becomes effective, but if no such date is indicated to, means the date on which the AGREEMENT is signed and delivered by the last of the two parties to sign and deliver.

ENGINEER - The DIRECTOR acting either directly or through his properly authorized agents, designated by him in writing, such agents acting within the scope of the particular duties delegated to them.

ENGINEER'S ESTIMATE - The list of estimated quantities of WORK to be performed, as contained in the PROPOSAL FORM.

EXTRA WORK – New or unforeseen work not covered by the CONTRACT DOCUMENTS at bid time, as determined by the ENGINEER.

FEDERAL AGENCIES - Whenever, in the SPECIFICATIONS, reference is made to any Federal agency or officer, such reference shall be deemed made to any agency or officer succeeding in accordance with law to the powers, duties, jurisdiction, and authority of the agency or officer mentioned.

FEDERAL SPECIFICATIONS - The particularly designated standard specifications of the United States Government.

FIELD ACCEPTANCE LETTER - A letter issued to CONTRACTOR by the ENGINEER upon completion by CONTRACTOR of all the WORK, including PUNCH LIST items, to ENGINEER's satisfaction. The date of that letter will be commencement date of guaranty periods.

FIELD ORDER - A written order issued by ENGINEER which orders minor changes in the WORK but which does not involve a change in the CONTRACT PRICE or the CONTRACT TIME.

FIXED COSTS - Any necessary labor, material, and equipment costs directly expended on the item or items under consideration which remain constant regardless of the quantity of the WORK done.

GENERAL PROVISIONS or GENERAL PROVISIONS OF THE CONSTRUCTION CONTRACT - A part of CONTRACT DOCUMENTS, included in these STANDARD SPECIFICATIONS, set forth the conditions and requirements applicable to all construction contracts originated by the DEPARTMENT.

GRADING PLANE - The surface of the basement material upon which the lowest layer of subbase, base, pavement, surfacing, or other specified layer, is placed.

GREEN WASTE – Processed green material, ground yard waste (leave, grass, brush, etc.)

HIGHWAY - The whole right-of-way, or area which is reserved for, and secured for use in constructing the roadway and its appurtenances.

INSPECTOR - All persons employed by the COUNTY to be responsible to the ENGINEER, and under his direction, to inspect the WORK as the construction proceeds.

LABORATORY - The County of Yolo laboratory or the designated materials testing laboratory authorized by the DIRECTOR to test materials and WORK involved in the CONTRACT.

LEGAL HOLIDAYS - Those days designated as State holidays in the California Government Code.

LIQUIDATED DAMAGES - The amount prescribed in the CONTRACT DOCUMENTS pursuant to the authority of the California Government Code Section 53069.85, to be paid to the COUNTY or to be deducted from any payment due or to become due to the CONTRACTOR, for each CALENDAR DAY delay beyond the time allowed in the CONTRACT DOCUMENTS for completing the whole, or any specified portion of the WORK, or causing or allowing any disruption in the normal operations as further described in Section 9-5 of the GENERAL PROVISIONS.

LITTER – Any garbage or trash encountered in the green waste or foundation layer soil during clearing and grubbing activities.

LOCAL AGENCY PUBLIC CONSTRUCTION ACT - Part 3, Chapter 1, of the California Public Contract Code. The provisions of this Act and other applicable laws form and constitute a part of the provisions of the CONTRACT DOCUMENTS to the same extent as if set forth therein in full.

MANUAL OF TRAFFIC CONTROLS - The State of California Department of Transportation publication entitled "Manual of Traffic Controls for Construction and Maintenance Work Zones."

NOTICE TO PROCEED - A written notice given by the DIRECTOR to CONTRACTOR fixing the date on which the CONTRACT TIME will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR's obligations under the CONTRACT DOCUMENTS.

PAVEMENT - The uppermost layer of material placed on the traveled way or shoulders. This term is used interchangeable with surfacing.

PLANS or DRAWINGS - The drawings which show the character and scope of the WORK to be performed and which have been approved by the DIRECTOR and are referred to in the CONTRACT DOCUMENTS. The PLANS being a part of the CONTRACT DOCUMENTS include the following whether or not reproduced in the TECHNICAL PROVISIONS:

(A) STANDARD DRAWINGS - The Yolo County Department of Community Services Standard Plans, as included in these STANDARD SPECIFICATIONS.

(B) PROJECT DRAWINGS - The plans listed as project drawings in the TECHNICAL PROVISIONS. These plans show specific layouts, profiles, typical cross-sections, sections, details and dimensions peculiar to the WORK, and supplemented by the STANDARD DRAWINGS insofar as the same may apply.

(C) Any other plans or drawings referred to in the TECHNICAL PROVISIONS, STANDARD CONSTRUCTION SPECIFICATIONS, STANDARD DRAWINGS or PROJECT DRAWINGS.

PROJECT - The total construction of which the WORK to be provided under the CONTRACT DOCUMENTS may be the whole, or part, as indicated elsewhere in the CONTRACT DOCUMENTS.

PROPOSAL - The offer of the BIDDER for the WORK when made out and submitted on the prescribed PROPOSAL FORM, properly signed and guaranteed.

PROPOSAL FORM - The approved form upon which the COUNTY requires formal bids be prepared and submitted for the WORK.

PROPOSAL GUARANTY - The cash, cashier's check, certified check, or bidder's bond accompanying the PROPOSAL submitted by the BIDDER, as a guaranty that the BIDDER will enter into a CONTRACT with the COUNTY for the performance of the WORK if the CONTRACT is awarded to him.

PUNCH LIST - A written list of deficiencies to be remedied by CONTRACTOR prior to final acceptance of the WORK by the ENGINEER.

REFERENCE SPECIFICATIONS - Building, Electrical and Plumbing Codes, manufacturer's specifications or recommendations, and any other codes, specifications, or reference materials specified in the CONTRACT DOCUMENTS.

RESIDENT ENGINEER or RESIDENT PROJECT REPRESENTATIVE - The authorized representative of ENGINEER who is assigned to the site or any part thereof, or the ENGINEER himself if no other person has been designated the authority of a resident engineer.

ROADBED - The roadbed is that area between the intersection of the upper surface of the roadway and the side slopes or curb lines. The roadbed rises in elevation as each increment or layer of subbase, base, surfacing or pavement is placed. Where the medians are so wide as to include areas of undisturbed land, a divided highway is considered as including two separate roadbeds.

ROADWAY - That portion of the highway included between the outside lines of sidewalks, or curbs, slopes, ditches, channels, waterways, and including all the appertaining structures, and other features necessary to proper drainage and protection.

SATISFACTORY MATERIALS - Materials which comply with the requirements of these SPECIFICATIONS and the PLANS.

SHOP DRAWINGS - All drawings, diagrams, illustrations, schedules, calculations, and other data which are specifically prepared by, or for CONTRACTOR, to illustrate some portion of the WORK and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the WORK. Shop Drawings shall be submitted by CONTRACTOR to the ENGINEER for ENGINEER's review and approval.

SHOULDERS - The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

STANDARD CONSTRUCTION SPECIFICATIONS - A part of the CONTRACT DOCUMENTS included in these STANDARD SPECIFICATIONS, consisting of written technical descriptions of materials,

equipment, construction systems, standards and workmanship as applied to the WORK encountered in the Yolo County Community Services projects, and certain administrative details applicable thereto.

STANDARD SPECIFICATIONS or YOLO STANDARD SPECIFICATIONS - These specifications containing: GENERAL and SPECIAL PROVISIONS, STANDARD CONSTRUCTION SPECIFICATIONS, and STANDARD DRAWINGS. The BOARD OF SUPERVISORS has adopted these SPECIFICATIONS as the STANDARD SPECIFICATIONS for its Department of Community Services contracts. When the standard specifications of other organizations or agencies, or parts of such specifications, are referred to in these SPECIFICATIONS, such standard specifications of other organizations or agencies, or parts of such specifications, are included in, and a part of, these SPECIFICATIONS.

STATE SPECIFICATIONS - The Standard Specifications of the State of California, Department of Transportation, also known as CALTRANS Standard Specifications, as currently approved and in effect. In referring to the STATE SPECIFICATIONS, the section numbers referred to are those contained in this current edition. If, in subsequent editions, the section numbers are changed, the reference shall be construed to refer to the class of material or items in the latest edition which was designated by that number in said current edition.

STATE - Whenever the word "State" is used in the STATE SPECIFICATIONS, it shall mean the COUNTY.

SUBBASE - A layer of specified material of planned thickness between a base and the basement material.

SUBCONTRACTOR - An individual, firm, or corporation, having a direct contract with CONTRACTOR or with any other SUBCONTRACTOR, who will perform work or labor or render service to the CONTRACTOR in or about the construction of the WORK.

SUBGRADE - That portion of the roadbed on which pavement, surfacing, base, subbase, or a layer of any other material is placed.

SUPPLIER - A manufacturer, fabricator, supplier, distributor, materialman, or vendor.

TECHNICAL SPECIFICATIONS - A part of CONTRACT DOCUMENTS describing the WORK and setting forth specific conditions or requirements peculiar to the WORK, and supplementary to the STANDARD SPECIFICATIONS.

TRAFFIC LANE - That portion of a traveled way for the movement of a single line of vehicles.

TRAVELLED WAY - That portion of the roadway for the movement of vehicles, exclusive of shoulders.

UNDERGROUND FACILITIES - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasement containing such facilities which have been installed underground to furnish any of the following services or materials:

electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

UNSATISFACTORY MATERIALS - Materials which do not comply with the requirements of these CONTRACT DOCUMENTS.

UTILITY - Tracks, overhead or underground wires, pipelines, conduits, ducts, or structures, sewers or storm drains owned, operated, or maintained in or across a public right-of-way or private easement, whether existing or proposed.

WASTE – Any objects encountered during excavation or clear and grub operations that are not dirt , vegetation, or litter.

WORK - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the CONTRACT DOCUMENTS. WORK is the result of performing services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the CONTRACT DOCUMENTS.

WORKING DAY - A working day is defined as any day, except as follows:

(A) Saturdays, Sundays, and Legal Holidays.

(B) Days on which CONTRACTOR is prevented by inclement weather or conditions resulting immediately therefrom, adverse to the current controlling operation or operations as determined by the ENGINEER, from proceeding with at least 75 percent of the normal labor and equipment force engaged on such operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operation or operations.

The CONTRACT TIME shall be considered as of the essence to the CONTRACT.

WORK DIRECTIVE CHANGE - A written directive to CONTRACTOR, issued on or after the EFFECTIVE DATE OF THE AGREEMENT and signed by the DIRECTOR ordering an addition, deletion or revision in the WORK, or responding to differing or unforeseen physical conditions under which the WORK is to be performed, or to emergencies. A WORK DIRECTIVE CHANGE may not change the CONTRACT PRICE or the CONTRACT TIME, but may lead to a subsequently issued CONTRACT CHANGE ORDER following negotiations by the parties as to its effect, if any, on the CONTRACT PRICE or CONTRACT TIME.

SECTION 2 - PROPOSAL REQUIREMENTS AND CONDITIONS

2-1 APPROXIMATE ESTIMATE

The quantities given in the Notice to Contractors, PROPOSAL, and CONTRACT are approximate only, being given as a basis for the comparison of BIDS. The COUNTY does not, expressly or by implication, agree that the actual amount of WORK will correspond therewith. The COUNTY also

reserves the right to increase or decrease the amount of any class or portion of the WORK, or to delete any portion of the WORK, as may be deemed necessary or advisable by the ENGINEER.

2-2 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK

The BIDDER shall examine carefully the site of the WORK contemplated, as well as the PROPOSAL, PLANS, SPECIFICATIONS, and CONTRACT DOCUMENTS therefor.

The submission of a BID shall be conclusive evidence that the BIDDER has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of WORK to be performed, the quantities of materials to be furnished, and as to the requirements of the PROPOSAL, PLANS, SPECIFICATIONS, and CONTRACT.

Where the DEPARTMENT has made investigations of site conditions including subsurface conditions in areas where WORK is to be performed under the CONTRACT, or in other areas, some of which may constitute possible local material sources, such investigations are made only for the purpose of study and design. Where such investigations have been made, BIDDERS or CONTRACTORS may, upon written request, inspect the records of the DEPARTMENT as to such investigations subject to and upon the conditions hereinafter set forth. Such inspection of records may be made at the office of the DEPARTMENT.

The records of such investigations are not a part of the CONTRACT and are shown solely for the convenience of the BIDDER or CONTRACTOR. It is expressly understood and agreed that the COUNTY assumes no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations thus made, the records thereof, or of the interpretations set forth therein or made by the DEPARTMENT in its use thereof, and there is no warranty or guaranty either express or implied, that the conditions indicated by such investigations or records thereof are representative of those existing throughout such areas, or any part thereof, or that unlooked-for developments may not occur, or that materials other than, or in proportions different from those indicated, may not be encountered.

When a log of test borings or other record of geotechnical data obtained by the DEPARTMENT'S investigation of subsurface conditions is included with the PLANS, it is expressly understood and agreed that said record does not constitute a part of the CONTRACT, represents only the opinion of the DEPARTMENT as to the character of the materials or the conditions encountered by it in its investigations, is included in the PLANS only for the convenience of BIDDERS and its use is subject to all of the conditions and limitations set forth in this Section 2-2.

When contour maps are used in the design of the project, the BIDDERS may inspect such maps, and if available, they may obtain copies for their use.

The availability or use of information described in this Section 2-2 is not to be construed in any way as a waiver of the provisions of the first paragraph in this Section 2-2, and a BIDDER or

CONTRACTOR is cautioned to make such independent investigation and examination as he deems necessary to satisfy himself as to conditions to be encountered in the performance of the WORK and with respect to possible local material sources, the quality and quantity of material available from such property, and the type and extent of processing that may be required in order to produce material conforming to the requirements of the SPECIFICATIONS.

No information derived from such inspection of records of investigations or compilation thereof made by the DEPARTMENT, or from the ENGINEER, or his assistants, will in any way relieve the BIDDER or CONTRACTOR from any risk or from properly fulfilling the terms of the CONTRACT.

2-3 BIDDER'S PROPOSAL

All PROPOSALS shall be made upon blank forms obtained from the DEPARTMENT as set forth in the Notice to Contractors. The BIDDER shall submit a PROPOSAL on these forms. PROPOSALS submitted on forms other than the one issued to the BIDDER will be disregarded. The PROPOSAL shall set forth for each item of WORK, in clear legible figures, the item price and total for each item. The BIDDER shall fill out all blanks in the PROPOSAL FORM as therein required.

The PROPOSAL FORM, BONDS, and AGREEMENT are bound separately from the Notice to Contractors, GENERAL PROVISIONS, SPECIAL PROVISIONS, TECHNICAL PROVISIONS, and PLANS. No part of the PROPOSAL FORM, BONDS, and AGREEMENT booklet shall be detached therefrom. The page numbers of each bound document are numbered sequentially, and by submitting its PROPOSAL, the BIDDER certifies that he or she has received and reviewed all pages.

The PROPOSAL must be signed with the full name of the BIDDER; if a partnership, by a member of the firm; if a limited partnership, by a general partner; if a corporation, by the appropriate officer thereof in the corporate name with the seal attached. When PROPOSALS are signed by an agent other than the officer or officers of a corporation authorized to sign contracts on its behalf, or a member of a partnership, a "Power of Attorney" must be on file with the COUNTY prior to opening bids, or shall be submitted with the PROPOSAL. All PROPOSALS otherwise submitted may be rejected as irregular and unauthorized.

The PROPOSAL shall consist of:

1. BIDDER'S Statement of Financial Responsibility, Technical Ability and Experience.
2. BIDDER'S Debarment and Suspension
3. BIDDER'S List of Subcontractors
4. BIDDER'S Noncollusion Declaration
5. BIDDER'S Iran Contracting Act Certification
6. BIDDER'S Public Works Contractor Registration Certification
7. BIDDER'S Proposal Guarantee

8. PROPOSAL.

Failure to furnish any of the above may result in rejection of the PROPOSAL.

All PROPOSALS shall be submitted as directed in the Notice to Contractors under sealed cover conspicuously marked as a PROPOSAL and identifying the project to which the PROPOSAL relates and the date of the bid opening therefor. PROPOSALS which are not properly marked or sealed may be disregarded.

2-4 REJECTION OF PROPOSALS

The COUNTY reserves the right to reject any or all PROPOSALS. PROPOSALS may be rejected if they show any alteration of form, additions not called for, conditional bids, incomplete bids, erasures or irregularities of any kind.

2-5 PROPOSAL GUARANTY

All PROPOSALS shall be accompanied by cash, cashier's check, certified check or bidder's bond, made payable to the County of Yolo. The amount of said requirement shall be not less than ten (10%) percent of the amount of the attached BID. The bidder's bond shall be executed by a corporation, as surety, authorized to issue surety bonds in the State of California. This requirement is a guaranty that, if awarded the CONTRACT, the BIDDER will sign the CONTRACT to do the WORK. In the event of the BIDDER'S failure to sign the CONTRACT, after such award for the WORK, the cash, check or bidder's bond shall be forfeited to the COUNTY.

2-6 WITHDRAWAL OF PROPOSALS

Any PROPOSAL may be withdrawn at any time prior to the hour fixed in the Notice to Contractors for the opening of PROPOSALS. A written request for the withdrawal of the PROPOSAL shall be filed with the County Clerk and shall be executed by the BIDDER or his duly authorized representative. The withdrawal of a PROPOSAL shall not prejudice the right of a BIDDER to file a new PROPOSAL.

Whether or not the PROPOSALS are opened exactly at the time fixed in the Notice to Contractors, a PROPOSAL will not be received after that time, nor may any PROPOSAL be withdrawn after the PROPOSAL opening time.

2-7 PUBLIC OPENING OF PROPOSALS

PROPOSALS will be opened and read publicly at the time and place indicated in the Notice to Contractors. BIDDERS are invited to be present.

2-8 BIDDER'S STATEMENT OF FINANCIAL RESPONSIBILITY, TECHNICAL ABILITY, AND EXPERIENCE

A record of the BIDDER'S experience in construction of a type similar to that contemplated under this CONTRACT shall be set forth in the PROPOSAL. It is the intent of the COUNTY to award the CONTRACT to the BIDDER who furnishes satisfactory evidence of having the requisite experience and ability to enable him to prosecute the WORK successfully and properly, as well as to complete it within the time named in the CONTRACT.

To determine the degree of responsibility to be credited to the BIDDER the COUNTY will weigh evidence that the BIDDER has satisfactorily performed other contracts of like nature, magnitude, and comparable difficulty and rates of progress.

Additional Satisfactory Evidence shall be defined in Section 11-4, "Submissions of Bids and Award of Contract".

For bids in excess of Seven Hundred Fifty Thousand Dollars (\$750,000), the CONTRACTOR must provide proof to show compliance with Section 8-1.5.

2-9 BIDDER'S STATEMENT OF SUBCONTRACTORS

Each BIDDER making a PROPOSAL to perform WORK described in these SPECIFICATIONS shall comply with the requirements of the Subletting and Subcontracting Fair Practices Act (Public Contract Code section 4100 et seq.), which forbids bid shopping and bid peddling and requires accurate listing of certain SUBCONTRACTORS.

The PROPOSAL shall set forth the name and location of the place of business, California contractor license number, and Department of Industrial Relations registration number of each SUBCONTRACTOR who will perform work or labor, or render service to the CONTRACTOR, in or about the construction of the work or improvement, or a SUBCONTRACTOR licensed by the State of California who, under subcontract to the CONTRACTOR, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the PLANS and SPECIFICATIONS, and the portion of the WORK which will be done by each SUBCONTRACTOR. This listing is required for SUBCONTRACTORS who will perform work or labor, or render service of a value of more than one-half (1/2%) percent of the BIDDER's total bid amount, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 (1%) percent of the BIDDER's total bid or ten thousand dollars (\$10,000), whichever is greater.

Should CONTRACTOR violate any of the provisions of the Subletting and Subcontracting Fair Practices Act, such violation shall be deemed a breach of the CONTRACT. The COUNTY shall have all remedies provided by California law, including but not limited to those provided in Public

Contract Code section 4110, allowing termination of the CONTRACT or a penalty assessment of ten (10%) percent of the subcontract.

2-10 ADDENDA

The COUNTY may, when it deems necessary, issue ADDENDA to the PLANS and SPECIFICATIONS to amend, clarify, or correct matter contained therein. Such ADDENDA shall constitute a part of said PLANS and SPECIFICATIONS and shall be equally binding with them. ADDENDA shall be forwarded to all prospective BIDDERS.

2-11 PROTESTS

The COUNTY encourages CONTRACTORS to resolve issues regarding requirements or the procurement process through written correspondence and discussions. The COUNTY is committed to fostering relationships with its CONTRACTORS to encourage an ongoing pursuit to fulfill requirements.

2-11.1 *PROTEST PROCEDURES:*

All protests shall be written under the BIDDER's letterhead and submitted in accordance with the provisions stated herein. Protests may be submitted by mail or email. Protests submitted by facsimile will not be accepted. All protests must be addressed and submitted to the Manager of Procurement. All protests shall include at minimum the following information:

- a) The name, address, and telephone number of the BIDDER;
- b) The signature of the BIDDER or BIDDER's representative;
- c) The solicitation title and PROPOSAL due date;
- d) Name of COUNTY employee designated as the RFP/IFB Coordinator;
- e) Identification of the COUNTY determination or recommendation being protested or statute or procedure that is alleged to have been violated;
- f) A detailed statement identifying the legal and/or factual grounds of the protest and all documentation supporting the BIDDER's position;
- g) The form of relief requested.

The contact information for the Manager of Procurement is as follows:

Manager of Procurement
Yolo County Department of Financial Services
625 Court St., Ste. 103
Woodland, CA 95695-3490
Ryan.Pistochini@YoloCounty.org

BIDDER's failure to comply with these procedures and time limits in this Section shall constitute a failure to exhaust administrative remedies and a waiver of any right to further protest, including filing a Government Code Claim or legal proceedings.

The Manager of Procurement will review the materials in connection with the protest, assess the merits of the protest, and provide a written decision on the protest. The Manager of Procurement's decision is final.

2-11.2 PROTEST OF CONTRACT DOCUMENTS:

BIDDERS who are concerned regarding irregularities or lack of clarity in the CONTRACT DOCUMENTS should bring such concerns to the attention of the COUNTY. Notice shall be provided prior to the closing date and time of the designated question and answer period in the Notice to Contractors.

Notice must be clearly marked "**Notice of Protest of Contract Documents**". No protest shall be considered after the deadline stated above.

BIDDERS who fail to do so forfeit all rights to protest a solicitation or any subsequent award based on the CONTRACT DOCUMENTS of this solicitation. In the event the protest is denied and the BIDDER wishes to continue in the solicitation process, they must still submit a PROPOSAL prior to the close of the solicitation

2-11.3 PROTEST OF BID:

Protests related to another BIDDER must be received by e-mail or hard copy no later than 4:00 PM Pacific time five (5) business days after the proposal opening date. Notice must be clearly marked "**Notice of Proposal Protest**". A review may be granted if the protest is received within the specified time and the protest is from a BIDDER.

Throughout the review process, the COUNTY has no obligation to delay or otherwise postpone an award of a contract based on a protest.

SECTION 3 - AWARD AND EXECUTION OF CONTRACT

3-1 AWARD OF CONTRACT

The COUNTY reserves the right to reject any and all PROPOSALS.

The award of the CONTRACT, if it be awarded, will be to the lowest responsible BIDDER whose PROPOSAL complies with all the requirements prescribed. Such award, if made, will be made within sixty (60) days after the opening of PROPOSALS. If the lowest responsible BIDDER refuses or fails to execute the CONTRACT, the BOARD OF SUPERVISORS may award the CONTRACT to the second lowest responsible BIDDER. Such award, if made, will be made within ninety (90) days after the opening of the PROPOSALS. If the second lowest responsible BIDDER refuses or fails to execute the CONTRACT, the BOARD OF SUPERVISORS may award the CONTRACT to the third lowest responsible BIDDER. Such award, if made, will be made within one-hundred twenty (120) days after the opening of the PROPOSALS. The periods of time specified above within which award of CONTRACT may be made shall be subject to extension for such further period as may be agreed upon in writing between the COUNTY and the BIDDER concerned.

All PROPOSALS will be compared on the basis of the ENGINEER's ESTIMATE of the quantities of WORK to be done.

3-2 EXECUTION OF CONTRACT

The CONTRACT shall be signed in duplicate by the successful BIDDER and returned, together with the required insurance certificates, within ten (10) days, not including Sundays and legal holidays, after the BIDDER has received notice that the CONTRACT has been awarded.

3-3 CONTRACT BONDS

Within (10) ten days of the award of the CONTRACT by the BOARD OF SUPERVISORS, CONTRACTOR shall file with the COUNTY a performance bond and a payment bond. The BONDS shall be executed by a surety, authorized to do business in the State of California, and shall be acceptable to the COUNTY. The performance bond shall be equal to one-hundred (100%) percent of the CONTRACT price. The payment bond shall be equal to one-hundred (100%) percent of the CONTRACT price. All BONDS shall be in United States dollars. All BONDS shall be furnished on forms provided by the COUNTY as included in the CONTRACT and bid documents.

No change or alteration of the WORK or modification of the CONTRACT DOCUMENTS between the COUNTY and CONTRACTOR shall release or exonerate any surety or sureties upon said BONDS. For the purpose of protecting the COUNTY against any failure of CONTRACTOR to perform the CONTRACT and make full payment thereunder for all WORK done and materials furnished, the principal and sureties on said BONDS, in consideration of the approval thereof by

the COUNTY, shall expressly recite and covenant therein that if, in the opinion of the COUNTY, any change of the conditions surrounding said WORK, any increase in the total amount of cost thereof, or any diminution of the security furnished by said BONDS renders the same insufficient, such additional security as may be required by the COUNTY shall be furnished by the principal on said BONDS within ten (10) days after notice of such requirement, and that default in the furnishing of such additional security shall be deemed a breach of the CONTRACT on the part of CONTRACTOR, and that no change in the CONTRACT DOCUMENTS and no agreement for reduced, added, or extra WORK in accordance with the provisions therefore, whether with or without notice to, or consent by, the sureties, shall relieve any of the parties to said BONDS.

3-4 FAILURE TO EXECUTE CONTRACT

Failure of the lowest responsible BIDDER, the second lowest responsible BIDDER, or the third lowest responsible BIDDER to execute the CONTRACT, provide acceptable BONDS, and file insurance as provided herein within ten (10) days, not including Sundays and legal holidays, after such BIDDER has received notice that the CONTRACT has been awarded to them shall be just cause for the forfeiture of the PROPOSAL GUARANTY. The successful BIDDER may file with the DIRECTOR a written notice, signed by the BIDDER or their authorized representative, specifying that the BIDDER will refuse to execute the CONTRACT if presented to them. The filing of such notice shall have the same force and effect as the failure of the BIDDER to execute the CONTRACT and furnish acceptable BONDS and insurance certification within the time herein before prescribed.

3-5 RETURN OF PROPOSAL GUARANTIES

Within ten (10) days after the award of the CONTRACT to the lowest responsible BIDDER, the COUNTY will return the PROPOSAL GUARANTY to each BIDDER that is not to be further considered in making the award, but will continue to retain the PROPOSAL GUARANTY submitted by the first, second, and third lowest BIDDERS. Each PROPOSAL GUARANTY will be held until the CONTRACT has been executed, after which each PROPOSAL GUARANTY, except any PROPOSAL GUARANTY which has been forfeited, will be returned to the respective BIDDERS whose PROPOSALS they accompany.

3-6 CONTRACTOR'S GUARANTY

Unless otherwise specified in the CONTRACT DOCUMENTS, CONTRACTOR shall unconditionally guaranty all materials, workmanship and equipment against defect for a period of one (1) calendar year, commencing on the date of recordation of the Notice of Completion.

During this unconditional guaranty period, the CONTRACTOR shall, upon the receipt of notice in writing from the COUNTY, promptly make all repairs caused by defective materials, workmanship or equipment.

By executing the CONTRACT, CONTRACTOR agrees that the COUNTY is authorized to provide for such repairs if, ten (10) days after receipt of written notice from the COUNTY, the CONTRACTOR has failed to make or undertake, with due diligence, the repairs. In the case of an emergency where, in the opinion of the ENGINEER, delay could cause serious loss or damage, repairs may be made by the COUNTY without notice being sent to CONTRACTOR, and all expense associated therewith shall be charged to CONTRACTOR.

The contract bonds furnished in accordance with Section 3-3, "Contract Bonds," of these SPECIFICATIONS must remain in full force and effect during the guarantee period and the obligations of the surety shall continue as long as any obligation of CONTRACTOR remains.

In the case of conflict between this guarantee provision and any warranty provision included in the CONTRACT, the most advantageous provisions to the COUNTY will apply.

Nothing in this Section shall be construed to be a waiver of any additional rights or remedies available to the COUNTY through local, State, and Federal ordinances and codes.

3-7 PRE-CONSTRUCTION CONFERENCE

Prior to start of construction, a conference will be called for the purpose of reviewing the construction program with CONTRACTOR. At this conference the sequence of WORK, methods of access to the construction site, and temporary facilities shall be agreed upon by CONTRACTOR and ENGINEER. Coordination of utilities within the project limits, including relocations and maintenance of existing facilities and additions thereto, shall be confirmed in writing by utility representatives and CONTRACTOR at this conference or within five (5) WORKING DAYS thereafter.

SECTION 4 - SCOPE OF WORK AND CHANGES

4-1 INTENT OF PLANS AND SPECIFICATIONS

The intent of the PLANS and SPECIFICATIONS is to prescribe the details for the construction and completion of the WORK, which the CONTRACTOR agrees to perform in accordance with the terms of the CONTRACT. Where the PLANS and SPECIFICATIONS describe portions of the WORK in general terms, but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used. Unless otherwise specified, CONTRACTOR shall furnish all labor, materials, tools, equipment, and incidentals, and do all the Work involved in executing the CONTRACT in a satisfactory and expert manner. The WORK performed under the CONTRACT shall result in a complete operating system in satisfactory working condition with respect to the functional purposes of the installation, and no extra compensation will be allowed for anything omitted but fairly implied.

4-2 CONFORMANCE WITH CODES AND STANDARDS

All WORK and materials shall be in full accordance with the latest adopted standards and regulations of the State Fire Marshal; the California Building Code; Title 24 of the California Administrative Code; the California Electrical Code; the California Plumbing Code; and other applicable codes, laws, or regulations. Nothing in these PLANS or SPECIFICATIONS is to be construed to permit WORK not conforming to these requirements. When the WORK detailed in the PLANS and SPECIFICATIONS differs from governing codes, CONTRACTOR shall furnish and install the higher standard called for.

4-3 CHANGES AND EXTRA WORK

The COUNTY reserves the right to make alterations, deviations, additions to, or deletions from the PLANS and SPECIFICATIONS. This includes the right to increase or decrease the quantity of any item or portion of the WORK or to delete any item or portion of the WORK, as determined by the ENGINEER to be necessary or advisable. The ENGINEER may also require EXTRA WORK as deemed necessary for the proper completion or construction of the whole WORK contemplated.

Any such changes will be set forth in a CONTRACT CHANGE ORDER. It will specify, in addition to the WORK to be done in connection with the change made, adjustment of CONTRACT TIME, if any, and the basis of compensation for such work. A CONTRACT CHANGE ORDER will not become effective until approved by the DIRECTOR or BOARD OF SUPERVISORS, as applicable. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the CONTRACT, and shall be subject to all terms, conditions, and provisions of the original CONTRACT.

Upon receipt of an approved CONTRACT CHANGE ORDER, CONTRACTOR shall proceed with the ordered WORK. If ordered in writing by the ENGINEER, CONTRACTOR shall proceed with the WORK, so ordered, prior to actual receipt of an approved CONTRACT CHANGE ORDER therefor.

Any alterations, extensions of time, EXTRA WORK, or any other changes may be made without securing consent of the CONTRACTOR's surety or sureties.

When the compensation for an item of WORK is subject to adjustment under the provisions of this Section, the CONTRACTOR shall, upon request, furnish the ENGINEER with adequate detailed cost data for such item of WORK. If the CONTRACTOR requests an adjustment in compensation for an item of WORK as provided in Sections 4-3.3.1 or 4-3.3.2, such cost data shall be submitted with his request.

4-3.1 PROCEDURE AND PROTEST

The COUNTY may direct changes in the WORK be delivering a WORK DIRECTIVE CHANGE. To the extent the WORK DIRECTIVE CHANGE results in a change to compensation or time, CONTRACTOR must timely request a CONTRACT CHANGE ORDER and comply with all change order procedures in accordance with this Section. Notwithstanding issuance of a WORK DIRECTIVE CHANGE, CONTRACTOR's failure to timely request a CONTRACT CHANGE ORDER shall constitute a waiver by CONTRACTOR of any adjustment to compensation or time extension for WORK performed under the directive. The COUNTY shall not be liable to CONTRACTOR for WORK performed or omitted by CONTRACTOR in reliance on verbal orders.

If CONTRACTOR intends to initiate a CONTRACT CHANGE ORDER, then CONTRACTOR shall provide the COUNTY with written notice of the underlying facts and circumstances that give rise to the proposed change. CONTRACTOR shall submit the notice of change/delay prior to performance of the work and no later than five (5) days after CONTRACTOR discovers the circumstances causing the need for the CONTRACT CHANGE ORDER. To be considered valid and complete, the notice of change/delay shall include a general statement of the circumstances giving rise to the notice of change/delay and a reasonable order of magnitude estimate of the additional costs and/or time. If the circumstances give rise to both a cost adjustment and time extension, CONTRACTOR shall submit the notice of change and notice of delay concurrently.

CONTRACTOR shall submit a formal written request for a CONTRACT CHANGE ORDER for any adjustment to CONTRACTOR's compensation and/or any extension of time. The CONTRACT CHANGE ORDER request shall be made prior to incurring any expense and within fourteen (14) days from either CONTRACTOR'S notice of change/delay or the COUNTY's WORK DIRECTIVE CHANGE ordering the change.

- a. The change order request shall include all of the following information (unless inapplicable to the change):
 - i. A detailed description of the circumstances giving rise to the request;

- ii. A complete itemized cost proposal;
- iii. Supporting documentation for all costs;
- iv. A time impact analysis showing the impact of the delay to the critical path to completion;
- v. If any added costs or information cannot be determined at the time of the change order request, the reason the costs or information cannot be determined at the time; and
- vi. Certification to the accuracy of the change order request under penalty of perjury.

If the COUNTY denies the change order request or disagrees with the proposal submitted by CONTRACTOR, the COUNTY will notify the CONTRACTOR, and the COUNTY will provide its opinion of the appropriate price and/or time extension. If no agreement can be reached, the COUNTY shall have the right to order the work performed on a time-and-material basis by CONTRACT CHANGE ORDER or to issue a unilateral CONTRACT CHANGE ORDER setting forth the COUNTY'S determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. The COUNTY's determination shall become final and binding if the CONTRACTOR fails to submit a claim in writing to the COUNTY within fourteen (14) days of the issuance of the unilateral CONTRACT CHANGE ORDER, disputing the terms of the unilateral CONTRACT CHANGE ORDER and providing such supporting documentation for its position as the COUNTY may reasonably require.

CONTRACTOR'S FAILURE TO PROVIDE A COMPLETE AND TIMELY NOTICE OF CHANGE/DELAY AND/OR CHANGE ORDER REQUEST, OR TO COMPLY WITH ANY OTHER REQUIREMENT OF THIS SECTION, SHALL CONSTITUTE A WAIVER BY CONTRACTOR OF THE RIGHT TO A CONTRACT ADJUSTMENT ON ACCOUNT OF SUCH CIRCUMSTANCES AND A WAIVER OF ANY RIGHT TO FURTHER RECOURSE OR RECOVERY BY REASON OF OR RELATED TO SUCH CHANGE BY MEANS OF THE CLAIMS DISPUTE RESOLUTION PROCESS OR BY ANY OTHER LEGAL PROCESS OTHERWISE PROVIDED FOR UNDER APPLICABLE LAWS.

CONTRACTOR recognizes and acknowledges that timely submission of a formal written notice of change/delay and change order request, whether or not the circumstances of the change may be known to the COUNTY or available to the COUNTY through other means, is not a mere formality but is of crucial importance to the ability of the COUNTY to promptly identify, prioritize, evaluate and mitigate the potential effects of changes. Any form of informal notice, whether verbal or written (including, without limitation, statements in requests for information, statements at regular job meetings or entries on monthly reports, daily logs or job meeting minutes), that does not strictly comply with the formal requirements of this Section, shall accordingly be insufficient.

A CONTRACT CHANGE ORDER signed by the CONTRACTOR indicates the CONTRACTOR's agreement therewith, including any adjustment in compensation or extension of time, and the full and final settlement of all costs (direct, indirect and overhead) related to the work authorized by the CONTRACT CHANGE ORDER.

The COUNTY may designate the forms to be used for notices, requests, and CONTRACT CHANGE ORDER. If so designated, CONTRACTOR may only use such forms. CONTRACTOR shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the CONTRACT CHANGE ORDER. No claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. The CONTRACTOR may not change or modify the COUNTY'S CONTRACT CHANGE ORDER form in an attempt to reserve additional rights.

4-3.2 *DETERMINING ADJUSTMENTS TO COMPENSATION*

CONTRACTOR shall not be entitled to any compensation for work subject to a CONTRACT CHANGE ORDER except as expressly set forth in this Section. The mark-up added in instances of EXTRA WORK shall constitute the entire amount of profit, any mark-ups, any field or home office overhead costs, including personnel, equipment or office space, any materials, or any costs of equipment idle time for such EXTRA WORK.

Adjustments, if any, in the amount to be paid CONTRACTOR by reason of any modifications of the WORK as set forth in the CONTRACT CHANGE ORDER, shall be determined by one or more of the following methods as elected by the ENGINEER:

- A. Lump Sum Price - By an acceptable lump sum proposal from CONTRACTOR.
- B. Unit Prices - By unit prices fixed by agreement between the COUNTY and CONTRACTOR.
- C. Force Account - By ordering CONTRACTOR to proceed with the EXTRA WORK and to keep and present in such form as the ENGINEER may direct, a correct account of the cost of the change, together with all vouchers therefor.

Estimates for Lump Sum Price and Unit Prices, and accounting for Force Account shall be limited to direct expenditures necessitated specifically by the change and shall be segregated as set forth in Section 4-4 Force Account Payment.

4-3.3 *INCREASED OR DECREASED QUANTITIES*

If the total pay quantity of any item of WORK required under the CONTRACT varies from the ENGINEER's ESTIMATE by 25 percent or less, payment will be made at the CONTRACT unit price. This calculation may result in either an additive or deductive CONTRACT CHANGE ORDER. Because CONTRACT unit price includes overhead and profit as determined by CONTRACTOR at

the time of its proposal submission, no mark up or deduction for overhead and profit will be allowed.

If the total pay quantity of any item of WORK required under the CONTRACT varies from the ENGINEER's ESTIMATE by more than 25 percent, in the absence of an executed CONTRACT CHANGE ORDER specifying the compensation to be paid, the compensation payable to the CONTRACTOR will be determined in accordance with Sections 4-3.3.1, 4-3.3.2, or 4-3.3.3, as applicable.

4-3.3.1 INCREASES OF MORE THAN 25 PERCENT

Should the total pay quantity of any item of WORK required under the CONTRACT exceed the ENGINEER's ESTIMATE by more than 25 percent, the WORK in excess of 125 percent of such estimate and not covered by an executed CONTRACT CHANGE ORDER specifying the compensation to be paid therefor, will be paid for by adjusting the CONTRACT unit price, as hereinafter provided, or at the option of the ENGINEER, payment for the WORK involved in such excess will be made on the basis of force account as provided in Section 4-4.

Such adjustment of the CONTRACT unit price will be the difference between the CONTRACT unit price and the actual unit cost, which will be determined as hereinafter provided, of the total pay quantity of the item. If the costs applicable to such item of WORK include fixed costs, such fixed costs will be deemed to have been recovered by CONTRACTOR by the payments made for 125 percent of the ENGINEER's ESTIMATE of the quantity of such item, and in computing the actual unit cost, such fixed costs will be excluded. Subject to the above provisions, such actual unit cost will be determined by the ENGINEER in the same manner as if the WORK were to be paid for on a force account basis as provided in Section 4-4, or such adjustment will be as agreed to by CONTRACTOR and the ENGINEER.

When the compensation payable for the number of units of an item of WORK performed in excess of 125 percent of the ENGINEER's ESTIMATE is less than \$5,000 at the applicable CONTRACT unit price, the ENGINEER reserves the right to make no adjustment in said price, except that an adjustment will be made if requested in writing by CONTRACTOR.

4-3.3.2 DECREASES OF MORE THAN 25 PERCENT

Should the total pay quantity of any item of WORK required under the CONTRACT be less than 75 percent of the ENGINEER's ESTIMATE, an adjustment in compensation pursuant to this Section will not be made unless CONTRACTOR so requests in writing. If CONTRACTOR so requests, the quantity of said item performed, unless covered by an executed CONTRACT CHANGE ORDER specifying the compensation payable therefor, will be paid for by adjusting the CONTRACT unit price as hereinafter provided. At the option of the ENGINEER, payment for the quantity of WORK of such item performed will be made on a force account basis as provided in Section 4-4, provided however, that in no case shall the payment for such WORK be less than that which would be made at the CONTRACT unit price.

Such adjustment of the CONTRACT unit price will be the difference between the CONTRACT unit price and the actual unit cost, which will be determined as hereinafter provided, of the total pay quantity of the item, including fixed costs. Such actual unit cost will be determined by the ENGINEER in the same manner as if the WORK were to be paid for on a force account basis as provided in Section 4-4; or such adjustment will be as agreed to by CONTRACTOR and the ENGINEER.

The payment for the actual pay quantity of any such item of WORK will in no case exceed the payment which would be made for the performance of 75 percent of the ENGINEER's ESTIMATE of the quantity for such item at the original CONTRACT unit price.

4-3.3.3 ELIMINATED ITEMS

Should any CONTRACT item of the WORK be eliminated in its entirety, in the absence of an executed CONTRACT CHANGE ORDER covering such elimination, payment will be made to CONTRACTOR for actual costs incurred in connection with such eliminated CONTRACT item, if incurred prior to the date of notification in writing by the ENGINEER of such elimination.

If materials conforming to the PLANS and SPECIFICATIONS are ordered by CONTRACTOR for the eliminated item prior to the date of notification of such elimination by the ENGINEER, and if orders for such material cannot be cancelled, it will be paid for at the actual cost to the CONTRACTOR. In such case, the material paid for shall become the property of the COUNTY and the actual cost of any further handling will be paid for. If the material is returnable to the vendor and if the ENGINEER so directs, the material shall be returned and CONTRACTOR will be paid for the actual cost of charges made by the vendor for returning the material. Payment will be made for the actual cost of handling returned material.

Payment for the actual costs or charges as provided in this Section 4-3.3.3 will be computed in the same manner as if the WORK were to be paid for on a force account basis as provided in Section 4-4.

4-3.4 *EFFECT OF EXTENSION OF TIME*

The granting of an extension of CONTRACT TIME for the completion of the WORK on account of delays which in the judgment of the ENGINEER are unavoidable delays or granted in a CONTRACT CHANGE ORDER, shall in no way operate as a waiver on the part of the COUNTY of any of its rights under this CONTRACT.

4-4 FORCE ACCOUNT PAYMENT

When a CONTRACT CHANGE ORDER is to be paid for on a force account basis, the labor, materials, and equipment used in the performance of such WORK shall be subject to the approval of the ENGINEER, and compensation being determined as follows:

4-4.1 *WORK PERFORMED BY CONTRACTOR*

CONTRACTOR will be paid the direct costs for labor, materials and equipment used in performing the work determined as hereinafter provided in this Section.

To the total of the direct costs computed for labor, materials and equipment, there will be added a markup of fifteen percent (15%) to the cost of labor, fifteen percent (15%) to the cost of materials, and fifteen percent (15%) to the equipment rental.

The above markups shall constitute full compensation for all overhead costs and profits, which shall be deemed to include all items of expense not specifically designated as cost or equipment rental in Sections 4-4.1.1, "Labor," 4-4.1.2, "Materials," and 4-4.1.3, "Equipment Rental." The total payment made as provided above shall be deemed to be the actual cost of such work to be borne by the COUNTY and shall constitute full compensation therefor.

When EXTRA WORK to be paid for on a force account basis is performed by a subcontractor by a CONTRACT CHANGE ORDER, an additional markup of five percent (5%) may be added to the total cost of that EXTRA WORK including all markups specified in this Section 4-4.1. The additional five percent (5%) markup shall reimburse the CONTRACTOR for additional administrative costs, and no other additional payment will be made by reason of performance of the EXTRA WORK by a Subcontractor.

4-4.1.1 **LABOR**

CONTRACTOR will be paid the cost of labor for the workers including foremen when authorized by the ENGINEER, used in the actual and direct performance of the EXTRA WORK. The cost of labor, whether the employer is CONTRACTOR, SUBCONTRACTOR, or other forces, will be the sum of the following:

A. **Actual Wages**

The actual wages paid shall include any employer payments to or on behalf of the workers for health and welfare, pension, vacation, and similar purposes. These wages for employees not employed full time on the WORK, shall be apportioned on the basis of their time spent on the WORK.

B. **Labor Surcharge**

To the actual wages, as defined in Section 4-4.1.1A, will be added a labor surcharge set forth in the Department of Transportation publication entitled Labor Surcharge And Equipment Rental Rates, which is in effect on the date upon which the EXTRA WORK is accomplished. The labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workers, other than actual.

4-4.1.2 MATERIALS

The COUNTY reserves the right to furnish such materials as it deems advisable, and CONTRACTOR shall have no claims for costs and markup on such materials.

Only materials furnished by CONTRACTOR and necessarily used in the performance of the WORK will be paid for. The cost of such materials will be the cost to the purchaser, whether CONTRACTOR, SUBCONTRACTOR, or other forces, from the Supplier thereof, except as the following are applicable:

- A. If a cash or trade discount by the actual supplier is offered or available to the purchaser, it shall be credited to the COUNTY notwithstanding the fact that such discount may not have been taken.
- B. If materials are procured by the purchaser by any method which is not a direct purchase from, and a direct billing, by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by the ENGINEER, plus the actual costs, if any, incurred in the handling of such materials.
- C. If the materials are obtained from the supply or source owned wholly or in part by the purchaser, the cost of such materials shall not exceed the price paid by the purchaser for similar materials furnished from said source on CONTRACT items, or the current wholesale price for such materials delivered to the job site, whichever price is lower.
- D. If the cost of such materials is, in the opinion of the ENGINEER, excessive, then the cost of such material shall be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned, delivered to the job site, less any discounts as provided in the above subsection A.
- E. If CONTRACTOR does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, the cost shall then be determined in accordance with the above subsection D.

4-4.1.3 EQUIPMENT RENTAL

CONTRACTOR will be paid for the use of equipment at the rental rates listed for such equipment in the edition of the Department of Transportation publication, "Labor Surcharge and Equipment Rental Rates," which is in effect on the date upon which the EXTRA WORK is accomplished, regardless of ownership and any rental or other agreement, if such may exist, for the use of such equipment entered into by CONTRACTOR. If it is deemed necessary by the ENGINEER to use equipment not listed in said publication, a suitable rental rate for such equipment will be established by the ENGINEER. CONTRACTOR may furnish any cost data which might assist the ENGINEER in the establishment of such rental rate.

The rental rate paid as above provided shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Operators of rented equipment will be paid for as provided in Section 4-4.1.1, "Labor."

All equipment shall, in the opinion of the ENGINEER, be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer. Individual pieces of equipment or tools not listed in said publication and having a replacement value of \$150 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor.

The rental time to be paid for equipment on the EXTRA WORK shall be the time the equipment is in operation on the EXTRA WORK being performed.

The following shall be used in computing the rental time of equipment on EXTRA WORK:

1. When hourly rates are listed, less than 30 minutes of operation shall be considered to be 1/2 hour of operation;
2. When daily rates are listed, less than four (4) hours of operation shall be considered to be 1/2 day of operation; and,
3. Rental time will not be allowed while equipment is inoperative due to breakdowns.

For the use of equipment moved in on the EXTRA WORK and used exclusively for EXTRA WORK paid for on a force account basis, CONTRACTOR will be paid for the cost of transporting the equipment to the location of the EXTRA WORK and its return to its original location, all in accordance with the following provisions:

1. The original location of the equipment to be hauled to the location of the EXTRA WORK shall be agreed to by the ENGINEER in advance;
2. The COUNTY will pay the costs of loading and unloading such equipment;
3. The cost of transporting equipment in low bed trailers shall not exceed the hourly rates charged by established haulers;
4. The cost of transporting equipment shall not exceed the applicable minimum established rates of the Public Utilities Commission;
5. Should the CONTRACTOR desire the return of the equipment to a location other than its original location, the COUNTY will pay the cost of transportation in

accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the EXTRA WORK; and,

6. Payment for transporting and loading and unloading equipment, as above provided, will not be made if the equipment is used on the WORK in any other way than upon EXTRA WORK paid for on a force account basis.

4-4.2 *RECORDS*

CONTRACTOR shall maintain project records in such a manner as to provide a clear distinction between the direct costs of a CONTRACT CHANGE ORDER and the costs of other operations.

From the above records, CONTRACTOR shall furnish the ENGINEER completed daily CONTRACT CHANGE ORDER WORK reports, for each day to be paid for on a force account basis. The daily CONTRACT CHANGE ORDER reports shall itemize the materials used, and shall cover the direct cost of labor and the charges for equipment rental, whether furnished by the CONTRACTOR, SUBCONTRACTOR, or other forces. The daily CONTRACT CHANGE ORDER reports shall provide names or identifications and classifications of workers, the hourly rate of pay and hours worked, the size, type, and identification number of equipment, and hours operated.

Material changes shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily CONTRACT CHANGE ORDER reports, or if not available, they shall be submitted with subsequent daily CONTRACT CHANGE ORDER reports. Should said vendor's invoices not be submitted within sixty (60) DAYS after the date of delivery of the material or within fifteen (15) DAYS after completion of the CONTRACT, whichever occurs first, the COUNTY reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials are available, in the quantities concerned, delivered to the location of WORK, less any discounts provided in Section 4-4.1.2.A.

Said daily CONTRACT CHANGE ORDER reports shall be signed by CONTRACTOR or an authorized representative.

The ENGINEER will compare the COUNTY's records with the completed daily CONTRACT CHANGE ORDER reports furnished by the CONTRACTOR and make any necessary adjustments. When these daily CONTRACT CHANGE ORDER reports are agreed upon and signed by both parties said reports shall become the basis of payment for the EXTRA WORK performed, but shall not preclude subsequent adjustment based on a later audit by COUNTY.

CONTRACTOR's cost records, pertaining to EXTRA WORK paid for on a force account basis, shall be open to inspection or audit by representatives of the COUNTY, during the life of the CONTRACT, and for a period of not less than three (3) years after the date of acceptance thereof, and CONTRACTOR shall retain such records for that period. Where payment, for materials or labor, is based on the cost thereof to forces other than CONTRACTOR, CONTRACTOR shall make ever reasonable effort to insure that the cost records of such other forces will be open to

inspection and audit, by representatives of the COUNTY, on the same terms and conditions as the cost records of CONTRACTOR. If an audit is to be commenced more than sixty (60) DAYS after the acceptance date of the Contract, CONTRACTOR will be given a reasonable notice of the time when such audit is to be given.

4-5 PROCEDURE FOR RESOLVING CLAIMS

CONTRACTOR shall timely comply with any and all requirement of the CONTRACT DOCUMENTS pertaining to notices and requests for changes to the CONTRACT TIME or CONTRACT PRICE as a prerequisite to filing any claim governed by this Section. The failure to timely submit a notice of delay or notice of change, or to timely request a change to the time for completion or CONTRACTOR's compensation, or to timely provide any other notice or request required herein shall constitute a waiver of the right to further pursue the claim under the CONTRACT or at law.

- A. **Intent.** Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Section is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Section shall be construed to be consistent with all applicable law, including but not limited to these statutes.
- B. **Claims.** For purposes of this Section, "Claim" means a separate demand by the CONTRACTOR for:
 - a. An adjustment to the time for completion including, without limitation, for relief from damages or penalties for delay assessed by the COUNTY;
 - b. Payment by the COUNTY of money or damages arising from WORK done by or on behalf of the CONTRACTOR pursuant to the CONTRACT, payment for which is not otherwise expressly provided or to which the CONTRACTOR is not otherwise entitled; or
 - c. An amount the payment of which is disputed by the COUNTY.

A "Claim" does not include any demand for payment for which the CONTRACTOR has failed to provide notice, request a CONTRACT CHANGE ORDER, or otherwise failed to follow any procedures contained in the CONTRACT DOCUMENTS.

- C. **Filing Claims.** Claims governed by this Section may not be filed unless and until the CONTRACTOR completes any and all requirements of the CONTRACT DOCUMENTS pertaining to notices and requests for changes to the CONTRACT PRICE OR CONTRACT

TIME, and CONTRACTOR'S request for a change has been denied in whole or in part. Claims governed by this Section must be filed no later than fourteen (14) days after a request for change has been denied in whole or in part or after any other event giving rise to the Claim. The Claim shall be submitted in writing to the COUNTY and shall include on its first page the following words in 16 point capital font: "THIS IS A CLAIM." The Claim shall include all information and documents necessary to substantiate the Claim, including but not limited to those identified below. Nothing in this Section is intended to extend the time limit or supersede notice requirements otherwise provided by CONTRACT DOCUMENTS. Failure to follow such contractual requirements shall bar any Claims or subsequent proceedings for compensation or payment thereon.

- D. **Documentation.** The CONTRACTOR shall submit all Claims in the following format:
- a. Summary description of Claim including basis of entitlement, merit and amount of time or money requested, with specific reference to the CONTRACT DOCUMENT provisions pursuant to which the Claim is made
 - b. List of documents relating to Claim:
 - i. Specifications
 - ii. Drawings
 - iii. Clarifications (Requests for Information)
 - iv. Schedules
 - v. Other
 - c. Chronology of events and correspondence
 - d. Narrative analysis of Claim merit
 - e. Analysis of Claim cost, including calculations and supporting documents
 - f. Time impact analysis in the form required by the CONTRACT DOCUMENTS or, if the CONTRACT DOCUMENTS do not require a particular format, CPM format, if an adjustment of the CONTRACT TIME is requested
- E. **COUNTY'S Response.** Upon receipt of a Claim pursuant to this Section, the COUNTY shall conduct a reasonable review of the Claim and, within a period not to exceed forty-five (45) DAYS, shall provide the CONTRACTOR a written statement identifying what portion of the Claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the Claim will be processed and made within sixty (60) DAYS after the COUNTY issues its written statement.
- a. If the COUNTY needs approval from its governing body to provide the CONTRACTOR a written statement identifying the disputed portion and the undisputed portion of the Claim, and the COUNTY'S governing body does not meet within the forty-five (45) DAYS or within the mutually agreed to extension of time following receipt of a Claim sent by registered mail or certified mail, return receipt requested, the COUNTY shall have up to three (3) DAYS following the next duly

publicly noticed meeting of the COUNTY'S governing body after the forty-five (45) DAY period, or extension, expires to provide the CONTRACTOR a written statement identifying the disputed portion and the undisputed portion.

- b. Within thirty (30) DAYS of receipt of a Claim, the COUNTY may request in writing additional documentation supporting the Claim or relating to defenses or Claims the COUNTY may have against the CONTRACTOR. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the COUNTY and the CONTRACTOR. The COUNTY'S written response to the Claim, as further documented, shall be submitted to the CONTRACTOR within thirty (30) DAYS (if the Claim is less than \$50,000, within fifteen (15) DAYS after receipt of the further documentation, or within a period of time no greater than that taken by the CONTRACTOR in producing the additional information or requested documentation, whichever is greater.

F. Meet and Confer. If the CONTRACTOR disputes the COUNTY'S written response, or the COUNTY fails to respond within the time prescribed, the CONTRACTOR may so notify the COUNTY, in writing, either within fifteen (15) DAYS of receipt of the COUNTY'S response or within fifteen (15) DAYS of the COUNTY'S failure to respond within the time prescribed, respectively, and demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, the COUNTY shall schedule a meet and confer conference within thirty (30) DAYS for settlement of the dispute.

G. Mediation. Within ten (10) business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the COUNTY shall provide the CONTRACTOR a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within sixty (60) DAYS after the COUNTY issues its written statement. Any disputed portion of the Claim, as identified by the CONTRACTOR in writing, shall be submitted to nonbinding mediation, with the COUNTY and the CONTRACTOR sharing the associated costs equally. The COUNTY and CONTRACTOR shall mutually agree to a mediator within ten (10) business days after the disputed portion of the Claim has been identified in writing, unless the parties agree to select a mediator at a later time.

- a. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.
- b. For purposes of this Section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in

which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this Section.

- c. Unless otherwise agreed to by the COUNTY and the CONTRACTOR in writing, the mediation conducted pursuant to this Section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.
- d. The mediation shall be held no earlier than the date the CONTRACTOR completes the WORK or the date that the CONTRACTOR last performs WORK, whichever is earlier. All unresolved Claims shall be considered jointly in a single mediation, unless a new unrelated Claim arises after mediation is completed.

H. **Procedures After Mediation.** If following the mediation, the Claim or any portion remains in dispute, the CONTRACTOR must file a Claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code prior to initiating litigation. For purposes of those provisions, the running of the period of time within which a Claim must be filed shall be tolled from the time the CONTRACTOR submits his or her written Claim pursuant to subdivision (a) until the time the Claim is denied, including any period of time utilized by the meet and confer conference.

I. **Civil Actions.** The following procedures are established for all civil actions filed to resolve Claims of \$375,000 or less:

- a. Within sixty (60) DAYS, but no earlier than thirty (30) DAYS, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of this CONTRACT. The mediation process shall provide for the selection within fifteen (15) DAYS by both parties of a disinterested third person as mediator, shall be commenced within thirty (30) DAYS of the submittal, and shall be concluded within fifteen (15) DAYS from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.
- b. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award

who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

J. Government Code Claim Procedures.

- a. This Section does not apply to tort claims and nothing in this Section is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.5 of Title 1 of the Government Code.
- b. In addition to any and all requirements of the CONTRACT DOCUMENTS pertaining to notices of and requests for adjustment to the CONTRACT TIME, CONTRACT PRICE, or compensation or payment for extra work, disputed WORK, construction claims and/or changed conditions, the CONTRACTOR must comply with the claim procedures set forth in Government Code Section 900, et seq. prior to filing any lawsuit against the COUNTY.
- c. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to adjustment of the CONTRACT TIME OR CONTRACT WORK for extra work, disputed work, construction claims, and/or changed conditions have been followed by CONTRACTOR. If CONTRACTOR does not comply with the Government Code claim procedure or the prerequisite contractual requirements, CONTRACTOR may not file any action against the COUNTY.
- d. **A Government Code claim must be filed no earlier than the date the WORK is completed or the date the CONTRACTOR last performs WORK on the PROJECT, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims known to CONTRACTOR or that should reasonably be known to CONTRACTOR excepting only new unrelated Claims that arise after the Government Code claim is submitted.**

- K. **Non-Waiver.** The COUNTY's failure to respond to a Claim from the CONTRACTOR within the time periods described in this Section or to otherwise meet the time requirements of this Section shall result in the Claim being deemed rejected in its entirety, and shall not constitute a waiver of any rights under this Section.

SECTION 5 - RESPONSIBILITIES OF THE CONTRACTOR

5-1 SUPERVISION AND SUPERINTENDENCE

1. CONTRACTOR shall supervise and direct the WORK competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the WORK in accordance with the CONTRACT DOCUMENTS. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence, or procedure of construction which is indicated in, and required by, the CONTRACT DOCUMENTS. CONTRACTOR shall be responsible to see that the finished WORK complies accurately with the CONTRACT DOCUMENTS.
2. CONTRACTOR shall keep on the site, at all times during its progress, a competent resident superintendent, who shall not be replaced without written notice to COUNTY and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.
3. The right of general supervision shall not make the CONTRACTOR an agent of the COUNTY; and the liability of the CONTRACTOR for all damages to persons or to public or private property, arising from the execution of the WORK, shall not be lessened because of such general supervision.

5-2 LABOR, MATERIALS AND EQUIPMENT

1. CONTRACTOR shall provide competent, suitable qualified personnel to survey and lay out the WORK and perform construction as required by the CONTRACT DOCUMENTS. CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons, the WORK, or property at the site or adjacent thereto, and except as otherwise indicated in the CONTRACT DOCUMENTS.
2. Unless otherwise specified in the CONTRACT DOCUMENTS, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up, and completion of WORK.
3. All materials and equipment shall be good quality and new, except as otherwise provided in the CONTRACT DOCUMENTS. If required by ENGINEER, CONTRACTOR

shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable supplier except as otherwise provided in the CONTRACT DOCUMENTS.

5-3 DISMISSAL OF UNSATISFACTORY EMPLOYEES

If any person employed by CONTRACTOR or any SUBCONTRACTOR shall fail or refuse to carry out the directions of the ENGINEER, or is, in the opinion of the ENGINEER, incompetent, unfaithful, intemperate, or disorderly, or uses threatening or abusive language to any person representing the COUNTY on the WORK, or if otherwise unsatisfactory, he shall be removed from the WORK immediately, and shall not again be employed on the WORK except with the consent of the ENGINEER.

5-4 SUBCONTRACTING AND ASSIGNMENT

The performance of the CONTRACT may not be subcontracted or assigned except upon written consent of the COUNTY, and no such subcontracting or assignment shall be permitted which would relieve the CONTRACTOR or its surety of their responsibilities under the CONTRACT.

The CONTRACTOR shall not, without the written consent of the COUNTY: (a) substitute any SUBCONTRACTOR in place of the SUBCONTRACTOR designated in the original PROPOSAL, or (b) permit any such subcontract to be assigned or transferred, or allow it to be performed by anyone other than the SUBCONTRACTOR listed on the PROPOSAL. Consent to such substitution or subletting shall only be given pursuant to California Public Contract Code section 4107.

In the event of such substitution, the COUNTY shall give at least five (5) WORKING DAYS' notice, in writing, to the listed SUBCONTRACTOR, unless the said SUBCONTRACTOR involved has itself advised the COUNTY, in writing, that it has knowledge of the CONTRACTOR's request for the substitution.

CONTRACTOR may assign monies due or to become due him under the CONTRACT, and such assignment will be recognized by the COUNTY, if given proper notice thereof, to the extent permitted by law, but any assignment of monies shall be subject to all deductions provided for in the CONTRACT, and all money withheld shall be subject to being used by the COUNTY for the completion of the WORK, in the event that CONTRACTOR should be in default therein.

When any portion of the WORK which has been subcontracted by the CONTRACTOR is not being prosecuted in a satisfactory manner, the SUBCONTRACT for such WORK shall be terminated immediately by the CONTRACTOR upon written notice from the ENGINEER, and the SUBCONTRACTOR shall not again be employed on the type of WORK in which its performance was unsatisfactory.

No SUBCONTRACTOR will be recognized as such, and all persons engaged in the WORK under this CONTRACT will be considered as employees of CONTRACTOR, and their WORK shall be subject to all the provisions of the CONTRACT. The COUNTY and its representatives will deal only with CONTRACTOR who shall be responsible for the proper execution of the entire WORK.

5-5 THIRD PARTY CLAIMS

CONTRACTOR shall be responsible for all third party claims and for costs or injuries incurred by a third party which result from the operations of CONTRACTOR.

5-6 ASSIGNMENT OF ANTITRUST ACTIONS

Pursuant to Section 4551 of the Government Code of the State of California, the following provisions shall be a part of this CONTRACT:

In entering into a Public Works Contract or a subcontract to supply goods, services, or materials pursuant to a Public Works Contract, CONTRACTOR or SUBCONTRACTOR offers and agrees to assign to the awarding body all right, 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 CONTRACTOR without further acknowledgement by the parties.

5-7 CONTRACTOR'S SUBMITTALS

CONTRACTOR shall furnish all drawings, specifications, descriptive data, certificates, samples, tests, methods, schedules, and manufacturer's instructions as specifically required in the SPECIFICATIONS, and all other information as may reasonably be required to demonstrate fully that the materials and equipment to be furnished and the methods of WORK comply with the provisions and intent of the CONTRACT DOCUMENTS. Submittals shall be furnished by email with an accurate description in the subject line. Each submittal shall have a cover page with a submittal number and accurate description. Normally the submittal will be returned to CONTRACTOR within thirty (30) DAYS exclusive of any time as awaiting clarification or further information; however, the time for return will necessarily vary and may exceed thirty (30) DAYS depending upon the complexity of the submittal, the number of submittals, and the express needs of CONTRACTOR.

Electrical, instrumentation, control, and communication system drawings shall include elementary and loop diagram drawings, functional single line system layout drawings, connection drawings, interconnection drawings, panel/cabinet fabrication drawings, and detailed circuit

board and component drawings. Detailed circuit schematics and circuit board layout drawings shall be provided which clearly show, locate, and identify all components and wiring. Each circuit board component shall be identified by the component's original manufacturer name and part number. Industry standard part numbers shall be used. Component values, voltage\current levels, setpoints, and timing values shall be defined.

Complete annotated software/firmware source code listings and program documentation shall be provided for all electronic/electrical systems, subsystems, assemblies, parts, components, and equipment which incorporate programmable devices. All instructions and hardware necessary to load, store, modify, and activate software/firmware source codes and programs shall be provided.

All of the information required herein shall be provided even though it may be considered to be proprietary. If any of the information required herein is considered to be proprietary, the COUNTY's standard Proprietary Agreement shall be executed between the COUNTY and CONTRACTOR, stipulating that all such information will be supplied by CONTRACTOR and kept confidential by the COUNTY. All proprietary data shall be identified as a part of CONTRACTOR's PROPOSAL and the COUNTY's Standard Proprietary Agreement shall be executed before award of CONTRACT.

Not more than 70 percent of all electronic/electrical WORK shall be paid for until all proprietary information has been submitted and approved. All submitted proprietary information shall be that which describes the final as-built WORK. No part of the WORK covered by the Proprietary Agreement shall be modified after proprietary submittal acceptance until after updated proprietary information has been submitted by CONTRACTOR and accepted by the ENGINEER. Updated proprietary information shall fully document all modifications to be implemented. All proprietary data shall be marked "PROPRIETARY" by CONTRACTOR.

If the information furnished shows any deviation from the CONTRACT DOCUMENTS, CONTRACTOR shall, by a statement in writing accompanying the information, advise the ENGINEER of the deviation and state the reason therefor. It shall be CONTRACTOR's responsibility to ensure there is no conflict with other submittals and to notify the ENGINEER in any case where its submittal may concern work by another contractor of the COUNTY. CONTRACTOR shall also ensure coordination of submittals among all related crafts.

The approval of CONTRACTOR's drawings or other descriptive material shall not relieve CONTRACTOR of responsibility for any error or of any obligation for accuracy of dimensions and details, for agreement and conformity with the CONTRACT DOCUMENTS, or responsibility to fulfill the CONTRACT as prescribed. Nor shall such approval be considered as approval of any deviation or conflict unless the ENGINEER has been expressly advised of the same as set forth immediately above, and the ENGINEER has expressly approved such deviation or conflict.

No changes shall be made by CONTRACTOR in any drawing after it has been approved, and the equipment or materials shall not deviate in any way therefrom except with written approval by

the ENGINEER. Fabrication or other WORK performed in advance of approval shall be done entirely at CONTRACTOR's risk.

Where any item of WORK is required to be installed in accordance with the manufacturer's recommendations, CONTRACTOR shall furnish three (3) complete sets of these manufacturer's installation recommendations to the ENGINEER prior to starting this phase of the WORK.

For use in subsequent maintenance and operations, CONTRACTOR shall furnish, unless otherwise provided for in the CONTRACT DOCUMENTS, three (3) bound and indexed copies of maintenance and operation information supplied by the manufacturer covering all equipment and systems included in the CONTRACT. The submittal shall include, but not be limited to:

Drawings

Illustrations

Parts Lists

Wiring Diagrams of systems

Internal Wiring Diagrams and Circuit Board Schematics and Layout Drawings

Manufacturer's recommended spare parts lists

Name, address and telephone number of nearest parts and service agency

Systems Balance Data

Maintenance and Service Instructions

Software including Annotated Source Lists and Programs

This submittal is required for all mechanical, electrical, instrumentation, control, communications, sound, control or special equipment and systems. CONTRACTOR shall submit the required data for review at least thirty (30) days prior to the final inspection date. Corrections, additions, and/or resubmittal of data shall be made as directed by the ENGINEER.

The ENGINEER, and other persons as he may designate, shall receive complete maintenance and operating instructions for all items included above prior to final inspection of the project.

5-8 SURVEYS, LINES, AND GRADES

Unless specified otherwise in the CONTRACT DOCUMENTS, CONTRACTOR is to provide all surveys, CONTRACTOR shall be responsible to do all necessary survey to layout and control the WORK to the elevations, lines and, dimensions shown on the PLANS. Any deviations must receive prior approval of the ENGINEER. All surveys shall be performed by or under the direction and supervision of a Registered Civil Engineer or Licensed Land Surveyor, licensed by the State of California.

Unless authorized by the ENGINEER, any WORK done without line and grade will be done at CONTRACTOR's risk. CONTRACTOR shall be responsible for the accuracy of his own layout work, and shall be liable for the preservation of all established lines and grades.

The CONTRACTOR shall be responsible for survey work for the layout of work features, grade control and performance of the WORK. CONTRACTOR may, at his expense, verify COUNTY survey of vegetative cover thickness.

The CONTRACTOR shall be responsible for (1) any lines, grades, or measurements which do not comply with specified or proper tolerances, or which are otherwise defective and (2) any resultant defects in the WORK.

When the SPECIFICATIONS require bid schedule items of WORK to be measured by surveying methods, the COUNTY shall be responsible for performing the surveys before and after the WORK. The ENGINEER shall calculate final quantities for payment purposes. The CONTRACTOR shall be responsible for notifying the ENGINEER in advance of surveys for bid items.

The COUNTY will perform construction record as-built topographic surveys of the construction area immediately prior to the start of the WORK and at the completion of the WORK. The construction record as-built surveys shall be performed at a maximum 50-foot on-centers and at grade breaks. The CONTRACTOR shall not place other components of the construction until directed by the ENGINEER.

The CONTRACTOR reserves the right to perform any desired checking of COUNTY'S surveys and request correction if necessary, but this shall not relieve the CONTRACTOR of the responsibility for adequate performance of the WORK.

The CONTRACTOR shall include in its schedule sufficient time to allow completion of the surveying and give 24 hours' notice before survey will be necessary. No claims for extra costs or delays shall be made for standard surveying conducted to determine compliance with the SPECIFICATIONS.

The tolerances generally applicable in setting survey stakes shall be as set forth below. Such tolerances shall not supersede stricter tolerances required by the PLANS or SPECIFICATIONS, and shall not otherwise relieve the CONTRACTOR of responsibility for measurements in compliance therewith. The CONTRACTOR shall provide local construction control points prior to any excavation and earthwork. These points shall be field-verified by the ENGINEER.

5-9 RECORD DOCUMENTS

It shall be the responsibility of the CONTRACTOR to document all as-built conditions (with the exception of earthwork surveys performed by the COUNTY'S Third Party Surveyor), including any construction record surveys. CONTRACTOR shall maintain in good order, up-to-date and in a safe

place at the site, one record copy of PROJECT DRAWINGS, SPECIFICATIONS, ADDENDA, CONTRACT CHANGE ORDERS, WORK DIRECTIVE CHANGES, FIELD ORDERS, approved samples, approved Shop Drawings, and written interpretations and clarifications. On these, CONTRACTOR shall mark all project conditions, locations, configurations, and any other changes or deviations which may vary from the information represented in the CONTRACT DOCUMENTS, including buried or concealed construction and utility features which are revealed during construction ("Record Documents"). Red ink shall be used for alterations and notes.

These Record Documents will be available to ENGINEER for reference and review at any time. Failure on the CONTRACTOR's part to keep Record Documents current could result in withholding partial payment. Upon completion of the WORK, these Record Documents will be delivered to the ENGINEER for review and approval. Record Documents shall be submitted in both hard copy and electronic form.

The information submitted by CONTRACTOR will be assumed to be correct, and the CONTRACTOR shall be responsible for, and liable to COUNTY, for the accuracy of such information, and for any errors or omissions which may or may not appear on the Record Documents.

5-10 WEEKLY JOB MEETINGS

CONTRACTOR's representative shall be required to attend the Weekly Job Meetings as established by ENGINEER. At each meeting CONTRACTOR shall present:

- a) Updated construction schedule (3 copies) and a written Weekly Progress Report including the statement regarding proposed measures to be taken to maintain the schedule, if such Weekly Progress Report is required by ENGINEER.
- b) A set of up-to-date Record Documents.

Minutes of the meeting shall be prepared and distributed by the ENGINEER, and shall indicate action responsibility and target date.

During the period when the WORK is suspended pending delivery of materials and equipment, Weekly Job Meetings may be suspended by ENGINEER.

5-11 USE OF PREMISES

The COUNTY shall provide the lands, rights-of-way, and easements upon which the WORK under this CONTRACT is to be done, and such other lands as may be designated on the PROJECT DRAWINGS for the use of CONTRACTOR, and CONTRACTOR shall confine his operations to within these limits.

The COUNTY's existing facilities shall not be available to the CONTRACTOR. CONTRACTOR shall provide and maintain office space, sanitary and any other facilities necessary. Facilities supplied by the CONTRACTOR shall be in compliance with all applicable regulations and laws.

The COUNTY shall make available an area of land near the project site for the CONTRACTOR to park equipment, store materials, and locate a site office, if the CONTRACTOR desires. The exact location shall be determined by the ENGINEER. Access, security measures, and utilities shall be the responsibility of the CONTRACTOR. CONTRACTOR shall clean the area so used and return it to its original condition, or better, upon completion of the WORK.

CONTRACTOR shall provide, at his own expense, any additional land and access thereto that may be required for temporary construction facilities or storage of materials.

CONTRACTOR shall use the construction gate on west perimeter fence for access by large or heavy equipment. CONTRACTOR is responsible for providing his own lock that is acceptable to the COUNTY and identified by a unique mark and registered with the ENGINEER. CONTRACTOR is responsible for keeping the gate locked at all times when not in use. Failure to lock the gate when gate is not being controlled by CONTRACTOR's personnel or after its use will result in a deduction of \$500 per occurrence from the CONTRACTOR'S progress pay estimate.

CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers, to the PROJECT site and land and areas identified in and permitted by the CONTRACT DOCUMENTS and other land and areas permitted by laws and regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any land or areas contiguous thereto, resulting from the performance of the WORK. Should any claim be made against the COUNTY or the ENGINEER by any such owner or occupant because of the performance of the WORK, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law.

During the progress of the WORK, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish, and other debris resulting from the WORK. If Contractor's activities expose waste or litter, CONTRACTOR shall pick up and dispose within 24 hours. At the completion of the WORK, CONTRACTOR shall remove all waste materials, rubbish and, debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by the COUNTY. At the end of each day of the contract period, the CONTRACTOR shall verify that the entire work area was left in a state that promotes surface drainage off and away from the area and from finished WORK. CONTRACTOR shall restore to original condition all property not designated for alteration by the CONTRACT DOCUMENTS.

CONTRACTOR shall not load, nor permit any part of any structure to be loaded, in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the WORK or adjacent property to stresses or pressures that will endanger it.

5-12 WATER

CONTRACTOR shall develop a water supply as required for the WORK. The COUNTY shall permit CONTRACTOR to use water obtained from a water source designated on the PLANS and in Section 11-11. The CONTRACTOR shall be responsible for all pumps, piping, and equipment necessary to obtain the water and use it for construction purposes.

No direct extractions from, or additions to, the groundwater shall be made unless approved by the ENGINEER.

5-13 DUST CONTROL

The CONTRACTOR shall be responsible for providing adequate dust control measures in the entire Work area during the term of the CONTRACT. Dust palliatives shall not be used without written authorization of the ENGINEER.

CONTRACTOR shall provide for dust control by spraying with water or other approved dust control product as necessary to the satisfaction of the ENGINEER during all WORK activities.

Dust control shall consist of furnishing water, required equipment, additives, accessories, and incidentals, and carrying out proper and efficient measures wherever and as often as necessary to reduce dust nuisance, and to prevent dust originating from construction operations during the completion of the CONTRACT, as required by the COUNTY/ENGINEER

No separate payment shall be made for any work performed or material used to control dust resulting from the CONTRACTOR's performance of the WORK, either inside or outside the right of way. Full compensation for such dust control shall be considered as included in the prices paid for the various items of WORK involved.

5-14 TRAFFIC CONTROL

Attention is directed to Sections 8-6, "Public Convenience," and 8-7, "Public Safety," of the GENERAL PROVISIONS. Nothing in this section shall be construed as relieving the CONTRACTOR from his responsibility as provided in said Section 8-7.

No WORK that requires a lane closure shall be performed without the approval of the ENGINEER.

The CONTRACTOR shall submit to the COUNTY, for approval, a traffic plan. At a minimum, the traffic plan shall include the following:

1. Traffic flow pattern, including CONTRACTOR's equipment and traffic flow patterns;
2. Alternate routes for CONTRACTOR's equipment and/or traffic concerns;
3. Times of day and schedule for traffic operations;

4. Locations of signs and traffic control devices and their types (if required); and
5. Number and location of flag persons (if required).

5-15 DIFFERING SITE CONDITIONS

If the WORK involves excavating trenches or other excavations that extend deeper than four (4) feet below the surface, the CONTRACTOR shall promptly, and before the following conditions are disturbed, notify the COUNTY in writing, of any:

- a) Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
- b) Subsurface or latent physical conditions at the site differing materially from those indicated by information about the site made available to BIDDERS prior to the deadline for submitting bids.
- c) Unknown physical conditions at the site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the CONTRACT DOCUMENTS.

The COUNTY shall promptly investigate said conditions, and if the COUNTY finds that said conditions do materially differ from conditions indicated in the CONTRACT DOCUMENTS, the COUNTY shall issue a CONTRACT CHANGE ORDER, increasing or decreasing CONTRACT TIME or CONTRACT PRICE or both, as appropriate, as provided for in these GENERAL PROVISIONS. If the CONTRACTOR is unable to perform or subcontract the work due, the COUNTY shall perform the WORK under separate contract.

In the event of a dispute, the CONTRACTOR shall not be excused from the CONTRACT TIME, but shall proceed with all WORK to be performed under the CONTRACT. The CONTRACTOR shall retain any and all rights provided either by CONTRACT or by law which pertains to the resolution of disputes and protests between the contracting parties.

5-16 QUALITY CONTROL

The CONTRACTOR is responsible for the quality of WORK performed under this CONTRACT. The ENGINEER shall provide additional testing and inspection for quality control as required by the TECHNICAL PROVISIONS and the CONSTRUCTION QUALITY ASSURANCE (CQA) PLAN. The CONTRACTOR must meet the requirements of the TECHNICAL PROVISIONS and the CQA PLAN to the satisfaction of the ENGINEER. The CONTRACTOR must meet all requirements of all manufacturer's warranties so as to maintain validity of the warranties. Neither the making nor the failure to inspect and test by the ENGINEER or the expressed or implied approval by the ENGINEER of any part of the WORK shall relieve the CONTRACTOR of the responsibility to complete and guarantee the WORK as specified.

References herein to materials testing apply to tests performed by an independent consultant, materials testing laboratory, or the COUNTY, at the COUNTY's expense.

5-17 STORM WATER POLLUTION PREVENTION

Storm, surface, ground, nuisance, or other waters may be encountered at various times during construction of the WORK. Therefore, the CONTRACTOR hereby acknowledges that it has investigated the risk arising from such waters, has prepared its PROPOSAL accordingly, and assumes any and all risks and liabilities arising therefrom.

No separate payment shall be allowed for the diversion and control of water. All costs to maintaining dry working areas shall be included in the unit prices paid for other items of WORK in the PROPOSAL.

CONTRACTOR shall keep itself and SUBCONTRACTORS, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the WORK including, without limitation, all applicable provisions regulating discharges of storm water; the Federal Water Pollution Control Act (33 U.S.C. § 13000 et seq.); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); and any and all regulations, policies, or permits issued pursuant to any such authority.

CONTRACTOR shall comply with all conditions of the State Water Resources Control Board ("State Water Board") National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity ("Construction General Permit") for all construction activity which results in the disturbance of in excess of one acre of total land area or which is part of a larger common area of development or sale. CONTRACTOR shall comply with the lawful requirements of the COUNTY, and any other applicable municipality, drainage district, or other local agency with jurisdiction over the location where the WORK is to be conducted, regarding discharges of storm water to separate storm drain systems or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

The CONTRACTOR shall comply with all requirements of the Storm Water Pollution Prevention Program (SWPPP) for the site, if applicable, and implement a drainage and erosion control plan for the duration of the PROJECT. The CONTRACTOR shall determine necessary interim drainage measures required for the WORK area. The CONTRACTOR assumes all responsibility for protection of his WORK from damages due to storm water erosion, etc. for the duration of the PROJECT. All costs relative to compliance with the SWPPP as well as drainage and erosion control shall be included in the cost of the various items of WORK and no additional compensation shall be made therefore. Copies of the SWPPP for the site are available through the Yolo County Department of General Services.

Failure to comply with the Construction General Permit, laws, regulations, and ordinances listed in this Section is a violation of federal and state law. Notwithstanding any other indemnity contained in the CONTRACT DOCUMENTS, CONTRACTOR agrees to indemnify and hold harmless the COUNTY its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, fees, costs, expenses, or losses or liabilities of any kind or nature which the COUNTY, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the Permit, laws, regulations, and ordinances listed above, arising out of or in connection with the WORK, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the COUNTY, its officials, officers, agents, employees or authorized volunteers.

All fines imposed by regulating agencies related to compliance with the SWPPP are the responsibility of the CONTRACTOR. The COUNTY reserves the right to defend any enforcement action or civil action brought against the COUNTY for CONTRACTOR's failure to comply with any applicable water quality law, regulation, or policy. CONTRACTOR hereby agrees to be bound by, and to reimburse the COUNTY for the costs associated with, any settlement reached between the COUNTY and any relevant enforcement entity.

5-18 AIR POLLUTION CONTROL

CONTRACTOR shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

Without limiting the foregoing, CONTRACTOR must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the Air Quality Management District with jurisdiction over the PROJECT and/or California Air Resources Board (CARB). CONTRACTOR shall specifically be aware of the application of these limits and requirements to "portable equipment", which definition is considered includes any item of equipment with a fuel-powered engine.

5-19 OTHER OBLIGATIONS AND RESPONSIBILITIES

Other CONTRACTOR's obligations and responsibilities shall be as set forth elsewhere in this GENERAL PROVISIONS, or elsewhere in the CONTRACT DOCUMENTS.

SECTION 6 - CONTROL OF WORK, INSPECTIONS AND ACCEPTANCE OF WORK

6-1 AUTHORITY OF THE ENGINEER

The ENGINEER shall decide all questions as to the quality or acceptability of materials furnished and WORK performed, as to the manner of performance and rate of progress of the WORK, as to the interpretation of the PLANS and SPECIFICATIONS, as to the acceptable fulfillment of the CONTRACT on the part of the CONTRACTOR, and as to compensation. The ENGINEER's decision shall be final and shall include the authority to enforce and make effective such decisions and orders which the CONTRACTOR fails to carry out promptly.

6-1.1 *FIELD ORDERS*

At any time and from time to time during the course of the WORK, the ENGINEER may, with respect to any part or parts of the WORK, issue, in writing to CONTRACTOR, a FIELD ORDER. CONTRACTOR shall comply with the requirements of such FIELD ORDER forthwith or within such time as may be specified therein.

FIELD ORDERS will be used to order or delete WORK, reject WORK or note deficiencies, clarify CONTRACT requirements or documents, or any other matters.

6-2 PLANS AND SHOP DRAWINGS

The CONTRACT PLANS furnished consist of general drawings and show such details as are necessary to give a comprehensive idea of the construction contemplated. All authorized alterations affecting the requirements and information given on the CONTRACT PLANS shall be in writing.

The PLANS shall be supplemented by such Shop Drawings prepared by the CONTRACTOR as are necessary to adequately control the WORK, as specified in Section 5-8, herein. No change shall be made by CONTRACTOR in any Shop Drawing after they have been approved by the ENGINEER.

Full compensation for furnishing all Shop Drawings shall be considered as included in the prices paid for the CONTRACT items of WORK to which such drawings relate, and no additional compensation will be allowed therefor.

6-3 CONFORMITY WITH CONTRACT DOCUMENTS AND ALLOWABLE DEVIATIONS

WORK and materials shall conform to the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the PLANS or indicated in the SPECIFICATIONS. Although measurement, sampling, and testing may be considered evidence of conformity, the

ENGINEER shall be the sole judge of whether the WORK or materials deviate from the PLANS and SPECIFICATIONS. The ENGINEER's decision shall be final as to any allowable deviations therefrom.

6-4 COORDINATION AND INTERPRETATION OF PLANS, STANDARD SPECIFICATIONS, AND TECHNICAL PROVISIONS

These CONTRACT DOCUMENTS including the STANDARD SPECIFICATIONS (GENERAL PROVISIONS, SPECIAL PROVISIONS, STANDARD CONSTRUCTION SPECIFICATIONS), the STANDARD DRAWINGS, PROJECT DRAWINGS, TECHNICAL PROVISIONS, CONTRACT CHANGE ORDERS, ADDENDA, and all supplementary documents are essential parts of the CONTRACT, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary, and to describe and provide for a complete WORK.

Where conflicts exist between the CONTRACT DOCUMENTS, such conflicts shall be clarified according to the following order, the first ranked taking precedence over the lower ranked:

- CONTRACT CHANGE ORDERS
- ADDENDA
- SPECIAL PROVISIONS
- TECHNICAL PROVISIONS
- PROJECT DRAWINGS
- CONTRACT
- STANDARD DRAWINGS
- GENERAL PROVISIONS
- STANDARD CONSTRUCTION SPECIFICATIONS
- Notice to Contractors
- PROPOSAL
- Reference Specifications
- Approved Shop Drawings

Should it appear that the WORK to be done, or any of the matters relative thereto, are not sufficiently detailed or explained in the CONTRACT DOCUMENTS, CONTRACTOR shall apply to the ENGINEER for such further explanations as may be necessary. CONTRACTOR shall conform to any such further explanations as part of the CONTRACT. In the event of any doubt or question arising respecting the true meaning of the CONTRACT DOCUMENTS, reference shall be made to the ENGINEER whose decision thereon shall be final.

With reference to PROJECT DRAWINGS or STANDARD DRAWINGS, the order of precedence shall always be as follows:

Figures govern over scaled dimensions; and

Detail drawings govern over general drawings

Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard, higher quality and most expensive shall always apply.

6-5 ORDER OF WORK

When required by the SPECIAL PROVISIONS or PLANS, the CONTRACTOR shall follow the sequence of operations as set forth therein.

Full compensation for conforming to such requirements will be considered as included in the prices paid for the various CONTRACT items of WORK, and no additional compensation will be allowed therefor.

6-6 INSPECTION

The ENGINEER shall at all times have access to the WORK during its construction, and shall be furnished with every reasonable facility for ascertaining that the materials and the workmanship are in accordance with the requirements and intentions of the CONTRACT DOCUMENTS. All WORK done and all materials furnished shall be subject to the ENGINEER's inspection.

The inspection of the WORK or materials shall not relieve CONTRACTOR of any obligations to fulfill the CONTRACT as prescribed. WORK and materials not meeting such requirements shall be made good. Unsuitable WORK or materials may be rejected, notwithstanding that such WORK or materials have been previously included in a progress estimate.

The PROJECT shall be subject to inspection at all times by the State, Federal, or other appropriate agency.

CONTRACTOR shall give twenty-four (24) hours' notice when an inspection is required. This notice shall be given at the office of the ENGINEER. Any WORK constructed without inspection as provided above, except with the specific consent or approval of the ENGINEER, or constructed contrary to the instructions or orders of the ENGINEER or his authorized representative, must, if requested by the ENGINEER, be uncovered for examination and properly restored at the CONTRACTOR's expense.

Properly authorized INSPECTORS shall be considered to be representatives of the ENGINEER. It will be their duty to inspect those portions of the WORK to which they are assigned. An INSPECTOR shall have the authority to order the WORK entrusted to their supervision stopped, if in their opinion such action becomes necessary, until the ENGINEER is notified and has determined and ordered that the WORK may proceed in due fulfillment of all CONTRACT requirements.

Re-examination of any WORK may be ordered by the ENGINEER, and such WORK must be uncovered by the CONTRACTOR. The CONTRACTOR shall pay the entire cost of such uncovering, re-examination, and replacement if the WORK does not conform to the CONTRACT DOCUMENTS.

6-7 SUGGESTIONS TO CONTRACTOR ADOPTED AT OWN RISK

Any plan or method of work suggested by the ENGINEER to CONTRACTOR, but not specified or required, if adopted or followed by CONTRACTOR in whole or in part, shall be used at the risk and responsibility of CONTRACTOR, and the ENGINEER and the COUNTY shall assume no responsibility therefor.

6-8 REMOVAL OF REJECTED AND UNAUTHORIZED WORK

All WORK which has been rejected shall be remedied, or removed, and replaced by CONTRACTOR in an acceptable manner without compensation for such removal, replacement, or remedial WORK.

Any work done beyond the lines and grades shown on the PLANS, or as established by the ENGINEER, or any EXTRA WORK done without written authority, will be considered as unauthorized work and no payment will be made therefor.

Upon order of the ENGINEER, unauthorized work shall be remedied, removed, or replaced at CONTRACTOR's expense.

Upon failure of CONTRACTOR to comply promptly with any order of the ENGINEER made under this Section, the COUNTY may cause rejected or unauthorized work to be remedied, removed, or replaced, and to deduct the costs from any money due or to become due CONTRACTOR.

6-9 FINAL INSPECTION, FIELD ACCEPTANCE, AND ACCEPTANCE BY THE BOARD

The ENGINEER will not make the final inspection until the WORK provided and contemplated by the CONTRACT has been completed, including the satisfactory performance of all functional and operation testing, and the final cleaning up performed. CONTRACTOR shall notify the ENGINEER, in writing, of the completion of the WORK, and the ENGINEER shall promptly inspect the WORK. CONTRACTOR or his representative may be present at the inspection. Upon his inspection of the WORK the ENGINEER shall notify CONTRACTOR, in writing, of any deficiencies to be remedied prior to final acceptance, by preparing a PUNCH LIST.

CONTRACTOR shall remedy all items shown on the PUNCH LIST prior to final acceptance by the ENGINEER.

The ENGINEER is not authorized to amend the CONTRACT by use of the PUNCH LIST. It is provided solely for the benefit of CONTRACTOR to enable determination of what items must be corrected before FIELD ACCEPTANCE LETTER can be issued by the ENGINEER.

CONTRACTOR will be notified in writing of any defects or deficiencies to be remedied. Within ten (10) calendar days of receiving the PUNCH LIST, CONTRACTOR shall proceed to correct such defects or deficiencies. When notified that WORK has been completed, the ENGINEER will again inspect the WORK to satisfy himself that all WORK has been done in accordance with the CONTRACT DOCUMENTS, and will issue a FIELD ACCEPTANCE LETTER and will recommend to the BOARD OF SUPERVISORS that they formally accept the CONTRACT.

The COUNTY reserves the right to require compliance with the CONTRACT DOCUMENTS, notwithstanding the issuance of a PUNCH LIST, or the completion by CONTRACTOR of all items on the PUNCH LIST.

In the event that the WORK still does not comply with the CONTRACT DOCUMENTS, the COUNTY reserves the right to issue such further PUNCH LISTS as may be required, or to deduct from the final payment the cost of correction of any WORK not completed in accordance with the CONTRACT DOCUMENTS, but accepted by the COUNTY, without the issuance of further PUNCH LISTS.

Field acceptance by the ENGINEER shall not bind the BOARD OF SUPERVISORS to formal acceptance, nor relieve CONTRACTOR from the responsibility of completing or correcting any WORK. Within ten (10) days of acceptance by the BOARD OF SUPERVISORS, a Notice of Completion will be filed with the County Recorder of Yolo County.

6-10 CONTRACTOR'S GUARANTY

Unless otherwise specified in the CONTRACT DOCUMENTS, CONTRACTOR shall unconditionally guaranty all materials, workmanship and equipment against defect for a period of one (1) calendar year, commencing on the date of recordation of the Notice of Completion.

During this unconditional guaranty period, the CONTRACTOR shall, upon the receipt of notice in writing from the COUNTY, promptly make all repairs caused by defective materials, workmanship or equipment.

By executing the CONTRACT, CONTRACTOR agrees that the COUNTY is authorized to provide for such repairs if, ten (10) days after receipt of written notice from the COUNTY, the CONTRACTOR has failed to make or undertake, with due diligence, the repairs. In the case of an emergency where, in the opinion of the ENGINEER, delay could cause serious loss or damage, repairs may be made by the COUNTY without notice being sent to CONTRACTOR, and all expense associated therewith shall be charged to CONTRACTOR.

The contract bonds furnished in accordance with Section 3-3, "Contract Bonds," of these SPECIFICATIONS must remain in full force and effect during the guarantee period and the obligations of the surety shall continue as long as any obligation of CONTRACTOR remains.

In the case of conflict between this guarantee provision and any warranty provision included in the CONTRACT, the most advantageous provisions to the COUNTY should apply.

Nothing in this Section shall be construed to be a waiver of any additional rights or remedies available to the COUNTY through local, State, and Federal ordinances and codes.

SECTION 7 - CONTROL OF MATERIALS

7-1 SOURCE OF SUPPLY AND QUALITY OF MATERIALS

CONTRACTOR shall furnish all materials required to complete the WORK, except materials that are designated in the CONTRACT DOCUMENTS to be furnished by the COUNTY.

Only materials conforming to the requirements of the CONTRACT DOCUMENTS shall be incorporated in the WORK.

The materials furnished and used shall be new except as may be provided elsewhere in the CONTRACT DOCUMENTS. The materials shall be manufactured, handled, and used in an expert manner to ensure completed WORK in accordance with the PLANS and SPECIFICATIONS.

Materials to be used in the WORK will be subject to inspection and tests by the ENGINEER or designated representative. CONTRACTOR shall furnish, without charge, such samples as may be required. CONTRACTOR shall furnish the ENGINEER a list of his sources of materials and the locations at which such materials will be available for inspection. The ENGINEER may inspect, sample, or test materials at the source of supply or other locations. But such inspection, sampling, or testing will not be undertaken until the ENGINEER is assured by CONTRACTOR of the cooperation and assistance of both CONTRACTOR and the supplier of the material. CONTRACTOR shall assure that the ENGINEER or authorized representative has free access at all times to the material to be inspected, sampled, or tested. It is understood that such inspections and tests if made at any point other than the point of incorporation in the WORK, in no way shall be considered as a guaranty of acceptance of such material, nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made. Inspection and testing so performed shall not relieve CONTRACTOR or suppliers of responsibility for quality control.

Manufacturer's warranties, guaranties, instruction sheets, and parts lists which are furnished with certain articles or materials incorporated in the WORK, shall be delivered to the ENGINEER before acceptance of the CONTRACT.

Reports and records of inspections made, and tests performed, when available at the site of the WORK, may be examined by CONTRACTOR.

7-2 COUNTY FURNISHED MATERIALS

Upon request of CONTRACTOR, materials furnished by the COUNTY will be made available to him within a reasonable time at the points designated in the SPECIAL CONDITIONS. They shall be loaded and hauled to the site of the WORK by CONTRACTOR, at CONTRACTOR's expense. The cost of handling and placing all materials shall be considered as included in the CONTRACT prices for the items in connection with which they are used.

CONTRACTOR will be held responsible for all received material, and deductions will be made from any money due CONTRACTOR to make good any shortages and deficiencies, from any cause whatsoever, which may occur after materials were received by CONTRACTOR.

7-3 STORAGE OF MATERIALS

Articles or materials to be incorporated in the WORK shall be stored in such a manner as to ensure the preservation of their quality and fitness for the WORK, and to facilitate inspection.

7-4 DEFECTIVE MATERIALS

All materials which the ENGINEER has determined do not conform to the requirements of the CONTRACT DOCUMENTS will be rejected whether in place or not. They shall be removed immediately from the site of the WORK, unless otherwise permitted by the ENGINEER. No rejected materials, the defects of which have been subsequently corrected, shall be used in the WORK unless approval, in writing, has been given by the ENGINEER. Upon failure of CONTRACTOR to comply promptly with any order of the ENGINEER made under the provisions in this Section 7-4, the ENGINEER shall have authority to cause the removal and replacement of rejected material and to deduct the cost thereof from any money due or to become due CONTRACTOR.

7-5 TRADE NAMES AND ALTERNATIVES

For convenience in designation on the PLANS or SPECIFICATIONS, certain articles or materials to be incorporated in the WORK are designated under a trade name or the name of a manufacturer and his catalogue information. The use of an alternative article or material which is of equal quality and of the required characteristics for the purpose intended will be permitted, subject to the following requirements:

The burden of proof as to the quality and suitability of alternatives shall be upon CONTRACTOR who shall furnish all information necessary as required by the ENGINEER. The ENGINEER shall be the sole judge as to the quality and suitability of alternative articles or materials and shall make all final decisions. Whenever the SPECIFICATIONS permit the substitution of a similar or equivalent material or article, no tests or action relating to the approval of such substitute material will be made until the request for substitution is made in writing by the CONTRACTOR. Such written request shall be accompanied by complete data as to the equality of the material or article proposed. Such request shall be made no later than thirty-five (35) DAYS after award of CONTRACT and in ample time to permit approval without delaying the WORK. Provisions regarding submission of substitution requests shall not in any way authorize an extension of time for the performance of this CONTRACT. If a substitution request is rejected by the COUNTY, the CONTRACTOR shall provide the articles or materials specified herein. The COUNTY shall not be responsible for any costs incurred by the CONTRACTOR associated with substitution requests.

7-6 PLANT INSPECTION

The ENGINEER may inspect the production of material, or the manufacture of products at the source of supply. Plant inspection, however, will not be undertaken until the ENGINEER is assured of the cooperation and assistance of both the CONTRACTOR and the supplier. The ENGINEER or an authorized representative shall have free entry at all times to such parts of the plant as concern the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. The COUNTY assumes no obligation to inspect materials at the source of supply.

7-7 CERTIFICATES OF COMPLIANCE

A Certificate of Compliance shall be furnished prior to the use of any materials for which the CONTRACT DOCUMENTS require that such a certificate be furnished. In addition, when so authorized in the CONTRACT DOCUMENTS, the ENGINEER may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance. The certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the SPECIFICATIONS. A Certificate of Compliance shall be furnished with each lot of material delivered to the WORK and the lot so certified shall be clearly identified in the certificate.

All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve CONTRACTOR of responsibility for incorporating material in the WORK which conforms to the requirement of the CONTRACT DOCUMENTS, and any such material not conforming to such

requirements will be subject to rejection whether in place or not. The COUNTY reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.

The form of the Certificate of Compliance and its disposition shall be as directed by the ENGINEER.

7-8 TESTING

Unless otherwise specified, all tests shall be performed in accordance with the methods used by the California Department of Transportation (CALTRANS) and shall be made by the ENGINEER or a designated representative.

CALTRANS has developed methods for testing the quality of materials and work. These methods are identified by number and are referred to in the SPECIFICATIONS as California Test. Copies of individual California Tests are available at the CALTRANS Transportation Laboratory, Sacramento, California.

Whenever a reference is made in the SPECIFICATIONS to a California Test by number, it shall mean the California Test in effect on the day the Notice to Contractors for the WORK is dated.

Whenever the SPECIFICATIONS provide an option between two or more tests, the ENGINEER will determine the test to be used.

Whenever a reference is made in the SPECIFICATIONS to a specification, manual, or test designation either of the American Society for Testing and Materials, the American Association of State Highway and Transportation Officials, Federal Specifications, or any other recognized national organization, and the number or other identification representing the year of adoption or latest revision is omitted, it shall mean the specification, manual, or test designation in effect on the day the Notice of Contractors for the WORK is dated. Whenever said specification, manual or test designation provides for test reports (such as certified mill test reports) from the manufacturer, copies of such reports, identified as to the lot of material, shall be furnished to the ENGINEER or CONTRACTOR. The manufacturer's test reports shall supplement the inspection, sampling, and testing provisions in this Section 7, "Control of Materials," and shall not constitute a waiver of the COUNTY's right to inspect. When material which cannot be identified with specific test reports in proposed for use, the ENGINEER may select random samples from the lot for testing. Test specimens from the random samples, including those required for retest, shall be prepared in accordance with the referenced specification and furnished and paid for by CONTRACTOR. The number of such samples and test specimens shall be entirely at the discretion of the ENGINEER.

When requested by the ENGINEER, CONTRACTOR shall furnish, without charge, samples of all materials entering into the WORK, and no material shall be used prior to approval by the ENGINEER, except as provided in Section 7-7, "Certificates of Compliance."

The COUNTY will pay for all initial testing unless specified otherwise in the CONTRACT DOCUMENTS. In the event of failing tests, CONTRACTOR shall make arrangements for and pay the cost of subsequent retesting. Retests shall be made by the same company that performed initial testing. Type, location, and number of tests to be taken shall be determined by the ENGINEER.

SECTION 8 - LEGAL RELATIONS AND RESPONSIBILITY

8-1 LAWS TO BE OBSERVED

CONTRACTOR shall keep itself fully informed of all existing and future State and Federal laws, and COUNTY and municipal ordinances 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 with all such orders and decrees of bodies or tribunals having any jurisdiction or authority over same.

CONTRACTOR shall at all times observe and comply with all existing laws, ordinances, regulations, orders, and decrees of bodies or tribunals having any jurisdictional authority over the WORK; and shall cause all agents and employees of the CONTRACTOR to do the same. CONTRACTOR shall indemnify and hold harmless the COUNTY, its officers, agents, and employees from any and all claims or liabilities, including, but not limited to, fines and penalties arising from, or based on the violation of any such law, ordinance, regulation, order, or decree, whether by CONTRACTOR or CONTRACTOR's agents and employees. If any discrepancy or inconsistency is discovered in the CONTRACT DOCUMENTS for the WORK in relation to any such law, ordinance, regulation, order or decree, CONTRACTOR shall forthwith report the same to the ENGINEER in writing.

8-1.1 *HOURS OF LABOR*

Eight (8) hours labor constitutes a legal day's work. CONTRACTOR shall forfeit, as a penalty to the COUNTY, Twenty-Five Dollars (\$25) for each worker employed in the execution of the CONTRACT, by the CONTRACTOR or any SUBCONTRACTOR, for each calendar day during which such worker is required, or permitted, to work more than eight (8) hours in any one calendar day, or more than forty (40) hours in any one calendar week, in violation of the provisions of the Labor Code of the State of California, and in particular, Section 1810 to Section 1814, thereof, inclusive. Notwithstanding the provisions of Section 1810 to Section 1814, WORK performed by employees of the CONTRACTOR in excess of eight (8) hours per day, and forty (40) hours during any one 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 times the basic rate of pay, as provided in Section 1815.

8-1.2 *PREVAILING WAGE*

CONTRACTOR is aware of the requirements of Labor Code sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is One Thousand Dollars \$1,000 or more, CONTRACTOR agrees to fully comply with such Prevailing Wage Laws. CONTRACTOR shall obtain a copy of the prevailing rates of per diem wages at the commencement of this CONTRACT from the website of the Division of

Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov. In the alternative, CONTRACTOR may view a copy of the prevailing rate of per diem wages which are on file at the DEPARTMENT and shall be made available to interested parties upon request. CONTRACTOR shall make copies of the prevailing rates of per diem wages for each craft, classification, or type of worker needed to perform work on the project available to interested parties upon request, and shall post copies at the CONTRACTOR'S principal place of business and at the project site, including a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned. CONTRACTOR shall defend, indemnify and hold the COUNTY, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or allege failure to comply with the Prevailing Wage Laws.

CONTRACTOR shall comply with Labor Code sections 1774 and 1775. In accordance with section 1775, CONTRACTOR shall forfeit as penalty to the COUNTY, Two Hundred Dollars (\$200.00) for each calendar day or portion thereof, for each worker paid less than the prevailing rates. In addition to said penalty and pursuant to said Section 1775, the difference between such 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 prevailing wage rate shall be paid to each worker by CONTRACTOR.

The COUNTY will not recognize any claim for additional compensation because of the payment by CONTRACTOR of any wage rate in excess of the prevailing wage rate set forth at the time of executing the CONTRACT. The possibility of wage increases is one of the elements to be considered by CONTRACTOR in determining a bid, and will not under any circumstances be considered as the basis of a claim against the COUNTY on the CONTRACT.

8-1.3 PAYROLL RECORDS

Pursuant to Labor Code section 1776, CONTRACTOR and SUBCONTRACTORS shall maintain weekly certified payroll records, showing the names, addresses, Social Security numbers, work classifications, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by them in connection with the WORK under this CONTRACT. CONTRACTOR shall certify under penalty of perjury that records maintained and submitted by CONTRACTOR are true and accurate. CONTRACTOR shall also require SUBCONTRACTORS to certify weekly payroll records under penalty of perjury.

In accordance with Labor Code section 1771.4, CONTRACTOR AND SUBCONTRACTOR shall furnish the certified payroll records directly to the Department of Industrial Relations on the specified interval and format prescribed by the Department of Industrial Relations, which may include electronic submission. CONTRACTOR shall comply with all requirements and regulations from the Department of Industrial Relations relating to labor compliance monitoring and enforcement. The requirement to submit certified payroll records directly to the Labor Commissioner under

Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

The payroll records described herein shall be certified and submitted by the CONTRACTOR at a time designated by the COUNTY. CONTRACTOR shall also provide the following:

- A. A certified copy of the employee's payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
- B. A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the Department of Industrial Relations.

Unless submitted electronically, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the Department of Industrial Relations or shall contain the same information as the forms provided by the DLSE.

Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency, COUNTY, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the CONTRACTOR awarded the CONTRACT or performing the CONTRACT shall not be marked or obliterated.

In the event of noncompliance with the requirements of this Section, CONTRACTOR shall have ten (10) DAYS in which to comply subsequent to receipt of written notice specifying in what respects the CONTRACTOR must comply with this Section. Should noncompliance still be evident after such 10-day period, CONTRACTOR shall pay a penalty of One Hundred Dollars (\$100.00) to COUNTY for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payment then due.

CONTRACTOR and each SUBCONTRACTOR shall preserve their payroll records for a period of three (3) years from the date of completion of the CONTRACT.

The responsibility for compliance with this Section shall rest upon the CONTRACTOR.

8-1.4 LABOR NONDISCRIMINATION

Attention is directed to Section 1735 of the Labor Code of the State of California, which reads as follows:

"No discrimination shall be made in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in Section

12940 of the Government Code, and every Contractor for public works violating this Section is subject to all the penalties imposed for a violation of this Chapter."

CONTRACTOR's attention is also directed to the requirements of the California Fair Employment and Housing Act (Government Code Sections 12900 et. seq.), to the regulations promulgated by the Fair Employment and Housing Commission to implement said Act, and to the nondiscrimination, affirmative action, and equal employment opportunity requirements in the CONTRACT DOCUMENTS.

Pursuant to the above and other applicable provisions of law, CONTRACTOR and SUBCONTRACTOR shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law on this project. CONTRACTOR will take affirmative action to insure that employees are treated during employment or training without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law.

8-1.5 APPRENTICES

CONTRACTOR and SUBCONTRACTORS shall comply with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code and Title 8, California Administrative Code Section 200 et. seq. To ensure compliance and complete understanding of the law regarding apprentices, and specifically the required ratio thereunder, CONTRACTOR and/or SUBCONTRACTORS shall, where some question exists, contact the Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, California, or one of its branch offices prior to commencement of WORK on the CONTRACTOR. Responsibility for compliance with this Section lies with the CONTRACTOR.

It is State policy to encourage the employment and training of apprentices on Public Works Contracts as may be permitted under local apprenticeship standards.

In addition, the COUNTY requires that all bidders on public work projects in excess of Seven Hundred Fifty Thousand Dollars (\$750,000.00) to participate in a State of California Division of Apprenticeship Standards approved joint labor and management apprenticeship program. Proof of compliance with this requirement must be provided at the time the PROPOSAL is submitted.

8-1.6 WORKER'S COMPENSATION

Pursuant to the requirements of Section 1860 of the California Labor Code, CONTRACTOR shall secure the payment of Workers' Compensation to its employees in accordance with the provisions of Section 3700 of the Labor Code. Prior to the commencement of WORK, CONTRACTOR shall sign and file with the ENGINEER a certification in the following form:

"I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of said Code and I will comply with such provisions before commencing the performance of the WORK of this CONTRACT."

Said certification is included in the CONTRACT, and signature and return of the CONTRACT as provided in Section 3-2, "Execution of Contract," shall constitute signing and filing of the said certificate.

CONTRACTOR shall post, and cause all SUBCONTRACTORS to post, in a conspicuous place on the project site, a statement, as required by Labor Code Section 3550, stating the name of the workers' compensation insurance carrier or that the employer is self-insured, and who is responsible for claims adjustment. The notice shall also include advice as to the injured employee's right to receive medical care, to select or change the treating physician pursuant to the provisions of Labor Code Section 4600, and the right to receive temporary disability indemnity, permanent disability indemnity, vocational rehabilitation services, and death benefits, as appropriate.

CONTRACTOR and SUBCONTRACTORS shall also give every new employee, either at the time the employee is hired or by the end of the first pay period, written notice of the information contained in Labor Code Section 3550.

8-1.7 PUBLIC WORKS CONTRACTOR REGISTRATION

Pursuant to Labor Code sections 1725.5 and 1771.1, the CONTRACTOR and its SUBCONTRACTORS must be registered with the Department of Industrial Relations prior to the execution of a contract to perform public works project. By entering into this CONTRACT, CONTRACTOR represents that it is aware of the registration requirement and is currently registered with the DIR. CONTRACTOR shall maintain a current registration for the duration of the PROJECT. CONTRACTOR shall further include the requirements of Labor Code sections 1725.5 and 1771.1 in any subcontract and ensure that all SUBCONTRACTORS are registered at the time this CONTRACT is entered into and maintain registration for the duration of the PROJECT. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

8-1.8 CONTRACTOR'S LICENSING LAWS

Attention is directed to the provisions of Chapter 9 of Division 3, of the Business and Professions Code concerning the licensing of contractors. All BIDDERS and CONTRACTORS shall be licensed in accordance with the laws of the State of California and any BIDDER or CONTRACTOR not so licensed is subject to the penalties imposed by such laws.

The Contractors' State License Board has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

8-2 PAYMENT OF TAXES

The CONTRACT prices paid for the WORK shall include full compensation for all taxes which the CONTRACTOR is required to pay, whether imposed by Federal, State, or local government, including, without being limited to, State Sales Tax and Federal Excise Tax.

In accordance with Revenue and Taxation Code section 107.6, the CONTRACT DOCUMENTS may create a possessory interest subject to personal property taxation for which CONTRACTOR will be responsible.

8-3 PERMITS AND LICENSES

CONTRACTOR shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the WORK.

The Environmental Quality Act of 1970 (Chap. 1433, Stats. 1970, as amended by Chapter 1154, Stats. 1972), may be applicable to permits, licenses, and other authorizations which the CONTRACTOR must obtain from the COUNTY in connection with performing the WORK of the CONTRACT. The CONTRACTOR shall comply with the provisions of said statutes in obtaining such permits, licenses, and other authorizations and they shall be obtained in sufficient time to prevent delays to the WORK.

In the event that the COUNTY has obtained permits, licenses, or other authorizations, applicable to the WORK, in conformance with the requirements in said Environmental Quality Act of 1970, the CONTRACTOR shall comply with the provisions of said permits, licenses, and other authorizations.

8-4 PATENTS

CONTRACTOR shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on, or incorporated in, the WORK, and agrees to indemnify and save harmless the COUNTY, the BOARD OF SUPERVISORS, the ENGINEER and their duly authorized representatives, from all suits at law or actions of every nature for, or on account of, the use of any patented materials, equipment, devices, or processes.

8-5 SAFETY AND HEALTH PROVISIONS

CONTRACTOR shall conform to all applicable occupational safety and health standards, rules, regulations, and orders established by the State of California. Local emergency phone numbers (police, fire, ambulance, hospital) shall be posted on the job site in a conspicuous location.

8-5.1 *TRENCH SAFETY*

CONTRACTOR shall comply with all applicable laws, ordinances, and regulations relating to Trench Safety. CONTRACTOR shall at all times maintain suitable barricades, warning devices, trench shoring, bracing, and covers, and other protective measures as deemed appropriate by the ENGINEER, which measures shall provide only the highest suitable level of protection to all workers, inspectors, and the general public. Attention is directed to the provisions of Section 8-6, "Public Convenience," Section 8-7, "Public Safety," and Section 8-9, "Preservation of Property."

CONTRACTOR shall submit to the ENGINEER at the preconstruction meeting, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from hazards of caving ground during the excavation of any trench or trenches five feet or more in depth. If such plan varies from shoring system standards established by the Construction Safety Orders of the California Code of Regulations, Department of Industrial Relations, the plan shall be prepared by a California registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations. CONTRACTOR shall designate in writing the "competent person" as defined in Title 8, California Code of Regulations, who shall be present at the work site each day that trenching/excavation is in progress. The "competent person" shall prepare and provide daily trenching/excavation inspection reports to the ENGINEER. CONTRACTOR shall also submit a copy of its annual California Occupational Safety and Health Administration (Cal/OSHA) trench/excavation permit.

8-5.2 *SOUND CONTROL REQUIREMENTS*

CONTRACTOR shall comply with all local sound control and noise level rules, regulations, and ordinances which apply to any WORK performed pursuant to the CONTRACT.

Each internal combustion engine used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.

8-5.3 *WEIGHT LIMITATIONS*

Unless expressly permitted in the CONTRACT DOCUMENTS, CONTRACTOR shall not operate construction equipment or vehicles of any kind which, laden or unladen, exceed the maximum weight limits set forth in Division 15 of the Vehicle Code, over completed or existing treated base, surfacing, pavement, or structures in any area within the limits of the PROJECT.

8-6 PUBLIC CONVENIENCE

This Section defines the CONTRACTOR's responsibility with regard to convenience of the public and public traffic in connection with construction operations.

CONTRACTOR's attention is directed to Section 8-7, "Public Safety" for provisions relating to the CONTRACTOR's responsibility for the safety of the public. The requirements in said Section 8-7 are in addition to the requirements of this Section 8-6, and CONTRACTOR will not be relieved of any responsibilities as set forth in said Section 8-7 by reason of conformance with any of the provisions in this Section 8-6.

In the event of a suspension of the WORK, attention is directed to Section 9-3, "Temporary Suspension of Work."

CONTRACTOR shall conduct operations so as to offer the least possible obstruction and inconvenience to the public. CONTRACTOR shall have under construction no greater length or amount of WORK than can be prosecuted properly with due regard to the rights of the public.

Unless otherwise provided in the CONTRACT DOCUMENTS, all traffic shall be permitted to pass through the WORK with as little inconvenience and delay as possible. Where possible, such traffic shall be routed on new or existing paved surfaces.

Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately by CONTRACTOR at CONTRACTOR's expense.

Existing traffic signal and street lighting systems shall be kept in operation for the benefit of the traveling public during progress of the WORK. Other forces will continue routine maintenance of existing systems.

Construction operations shall be conducted in such a manner so as to cause as little inconvenience as possible to abutting property owners.

Convenient access to driveways, houses, and buildings along the line of WORK shall be maintained. When the abutting property owner's access across the right-of-way line is to be eliminated, or to be replaced under the CONTRACT by other access facilities, the existing access shall not be closed until the replacement access facilities are usable.

Water and dust palliative shall be applied if ordered by the ENGINEER for the alleviation or prevention of dust nuisance. No separate payment will be made for any WORK performed, or material used, to control dust resulting from CONTRACTOR's performance of the WORK, or caused by public traffic, either inside or outside the right-of-way. Full compensation for such dust control will be considered as included in the prices paid for the various items of WORK involved.

In order to expedite the passage of public traffic through or around the WORK, and where ordered by the ENGINEER, CONTRACTOR shall install and maintain in good condition, signs, lights,

flares, temporary railing (Type K), barricades, and other facilities for the sole convenience and direction of public traffic. Also, where directed by the ENGINEER, CONTRACTOR shall furnish competent flaggers whose sole duties shall consist of directing the movement of public traffic through or around the WORK.

Should CONTRACTOR fail to install or maintain traffic control devices required by the ENGINEER or the CONTRACT DOCUMENTS, the ENGINEER may cause such installation or maintenance by other forces and shall deduct the cost thereof from money due, or to become due, CONTRACTOR under the CONTRACT.

Whenever a section of surfacing or pavement has been completed, CONTRACTOR shall open it to use by public traffic if the ENGINEER so orders, or may open it to use by public traffic if the ENGINEER so consents. In either case, CONTRACTOR will not be allowed any compensation due to any delay, hindrance, or inconvenience to operations caused by such public traffic, but will thereupon be relieved of responsibility for damage to the WORK caused by public traffic within the limits of such use. CONTRACTOR will not be relieved of cleanup and finishing operations, or of any other responsibility under the CONTRACT.

Except as otherwise provided in this Section 8-6 or in the CONTRACT DOCUMENTS, full compensation for conforming to the requirements in this Section 8-6 and in the CONTRACT DOCUMENTS shall be considered as included in the prices paid for the various CONTRACT items of WORK, and no additional compensation will be allowed therefor.

8-7 PUBLIC SAFETY

It is CONTRACTOR's responsibility to provide for the safety of traffic and the public during construction.

CONTRACTOR's attention is directed to Section 8-10, "Responsibility for Damage." Attention is also directed to Section 8-6, "Public Convenience," for provisions relating to the CONTRACTOR's responsibility for providing for the convenience of the public in connection with operations required to complete WORK under the CONTRACT.

When CONTRACTOR's operations create a condition hazardous to traffic or to the public, CONTRACTOR shall furnish, erect, and maintain such fences, temporary railing (Type K), barricades, lights, signs, and other devices, and take such other protective measures as are necessary to prevent accidents or damage or injury to the public. CONTRACTOR shall also furnish such flaggers as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered. All such measures shall be performed at CONTRACTOR's sole expense and without cost to the COUNTY.

Signs, lights, flags, and other warning and safety devices and their use shall conform to the requirements set forth in the current "MANUAL OF TRAFFIC CONTROLS - Warning Signs, Lights

and Devices for Use in Performance of Work Upon Highways," published by the Department of Transportation, State of California.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic. At the end of each day's WORK and at other times when construction operations are suspended for any reason, CONTRACTOR shall remove all equipment and other obstructions from that portion of the roadway for use by public traffic

Should CONTRACTOR appear to be neglectful or negligent in furnishing warning devices and taking protective measures as above provided, the ENGINEER may direct attention to the existence of a hazard, and the necessary warning devices shall be furnished and installed, and protective measures taken by CONTRACTOR at CONTRACTOR's expense. Should the ENGINEER point out the inadequacy of warning devices and protective measures, such action on the part of the ENGINEER shall not relieve CONTRACTOR from responsibility for public safety or abrogate obligation to furnish and pay for these devices and measures.

Except as otherwise provided in the CONTRACT DOCUMENTS, full compensation for conforming to all of the provisions in this Section 8-7, and in the CONTRACT DOCUMENTS, shall be considered as included in the prices paid for the various CONTRACT items of WORK, and no additional compensation will be allowed therefor.

8-8 USE OF EXPLOSIVES

The use of explosives is not allowed unless otherwise provided in the CONTRACT DOCUMENTS.

8-9 PRESERVATION OF PROPERTY-? Section below?

CONTRACTOR's attention is directed to Section 8-10, "Responsibility for Damage." Due care shall be exercised to avoid injury to existing highway improvements or facilities, utility facilities, adjacent property, and roadside trees, shrubs, and other plants that are not to be removed.

Trees, shrubs, and other plants that are not to be removed, pole lines, fences, signs, markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and water lines, all street facilities, and any other improvements or facilities within or adjacent to the WORK, shall be protected from injury or damage. If ordered by the ENGINEER, CONTRACTOR shall provide and install suitable safeguards, approved by the ENGINEER, to protect such objects from injury or damage. If such objects are injured or damaged by reason of CONTRACTOR's operations, they shall be replaced or restored at CONTRACTOR's expense. The facilities shall be replaced or restored to a condition as good as when CONTRACTOR entered upon the WORK, or as good as required by the SPECIFICATIONS accompanying the CONTRACT, if any such objects are a part of the WORK being performed under the CONTRACT. The ENGINEER may make or cause to be made such temporary repairs as are necessary to restore to service any damaged highway

facility. The cost of such repairs shall be borne by CONTRACTOR and may be deducted from any money due or, to become due, CONTRACTOR under the CONTRACT.

When Applicable, the CONTRACTOR's attention is also directed to the site plan which indicates the locations of existing observation wells, extraction wells, survey monuments, paved roads, groundwater monitoring wells on the project site, LCRS clean-outs, and leachate pipes, which are to be protected from damage Existing roads used as haul roads shall be returned to their original condition, as approved by the ENGINEER.

The CONTRACTOR shall be responsible for the repair or replacement of any existing facilities and equipment damaged by the CONTRACTOR's personnel, equipment, sub-contractors, or material suppliers.

When applicable, CONTRACTOR's attention is also directed to the possible existence of underground main or trunk line facilities not indicated on the PLANS or in the TECHNICAL PROVISIONS, and to the possibility that underground main or trunk lines may be in a location different from that which is indicated on the PLANS or in the TECHNICAL PROVISIONS. CONTRACTOR shall ascertain the exact location of underground main or trunk lines whose presence is indicated on the PLANS or in the TECHNICAL PROVISIONS, and the location of their service laterals or other appurtenances, and of existing service laterals or appurtenances of any other underground facilities which can be inferred from the presence of visible facilities such as buildings, meters, and junction boxes. This determination shall be made prior to doing WORK that may damage any of such facilities or interfere with their service. The locating of utilities shall be in conformance with Government Code Section 4216 except for the COUNTY's utilities located on the COUNTY's property and not on public right-of-way.

When applicable, CONTRACTOR shall immediately notify the ENGINEER of any delays to operations which are a direct result of underground main or trunk line facilities which were not indicated on the Plans or in the TECHNICAL PROVISIONS, or were located in a position substantially different from that indicated on the PLANS or in the TECHNICAL PROVISIONS. Such delays will be considered right-of-way delays within the meaning of Section 9-7, "Right-of-Way Delays," and compensation for such delay will be determined in accordance with said Section 9-7. CONTRACTOR shall be entitled to no other compensation for any such delay.

Except as provided above, full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the WORK involved in protecting or repairing property as specified in this Section 8-9, shall be considered as included in the prices paid for the various CONTRACT items of WORK and no additional compensation will be allowed therefor.

8-10 RESPONSIBILITY FOR DAMAGE

CONTRACTOR shall defend, indemnify, and save harmless the COUNTY and all its officers, agents, and employees from any and all claims, demands, damages, costs, expenses or liability occasioned by the performance or attempted performance of the provisions hereof, or in any

way arising out of the CONTRACT, including, but not limited to, inverse condemnation, equitable relief, any wrongful act, or any negligent act or omission to act on the part of CONTRACTOR or any of its agents, employees, independent contractors or SUBCONTRACTORS; provided, further, that the foregoing shall apply to any wrongful acts, or any actively or passively negligent acts or omissions to act, committed jointly or concurrently by CONTRACTOR, CONTRACTOR's agents, employees, or independent contractors or SUBCONTRACTORS, and the COUNTY, its agents, employees, or independent contractors.

Such indemnity obligation expressly extends to, and includes, any and all claims, demands, damages, costs, expenses, or liability occasioned as a result of damages to adjacent property caused by the conduct of the WORK.

Such indemnity obligation expressly extends to and includes any and all claims, demands, damages, costs, expenses, or liability occasioned as a result of the violation by the CONTRACTOR, the CONTRACTOR's agents, employees, or independent contractors or SUBCONTRACTORS, of any provisions of Federal or State law, including, but not limited to fines or penalties.

Such indemnity obligation also expressly extends to and includes any claims, demands, damages, costs, expenses, or liability occasioned by injury to or death of any person, or any property damage to property owned by any person while on or about the premises of the WORK, or as a result of the WORK, whether such persons are on or about the premises by right or not, whenever the WORK is alleged to have been a contributing cause in any degree whatsoever,

Nothing contained in the foregoing indemnity provisions shall be construed to require the CONTRACTOR to indemnify the COUNTY in contravention of Section 2782 of the Civil Code.

In providing any defense under this Section, CONTRACTOR shall use counsel reasonably acceptable to the COUNTY.

8-11 INSURANCE REQUIREMENTS

CONTRACTOR shall obtain at CONTRACTOR's sole cost and expense, all insurance required by CONTRACT AGREEMENT. Certificates of insurance and copies of the insurance policies shall be delivered to the COUNTY prior to execution of the CONTRACT and before any WORK is commenced. No payment will be made to the CONTRACTOR unless current insurance certificates are on file with the COUNTY at the time of the payment.

CONTRACTOR shall include all SUBCONTRACTORS as insured under its policies or shall furnish separate certificates and endorsements for each SUBCONTRACTOR. All coverages for SUBCONTRACTORS shall be subject to all the requirements stated herein.

8-12 LEGAL ACTIONS AGAINST THE COUNTY

In the event litigation is brought against the COUNTY concerning the compliance of the COUNTY with State or Federal laws, rules or regulations, or other applicable rules, regulations, or ordinances, the provisions of this Section shall apply.

- A. If, pursuant to court order, the COUNTY prohibits CONTRACTOR from performing all or any portion of the WORK, the delay will be considered a delay within the meaning of Section 9-7, "Right-of-Way Delays," unless the CONTRACT is terminated as hereinafter provided.
- B. If, pursuant to court order (other than an order to show cause) the COUNTY is prohibited from requiring CONTRACTOR to perform all or any portion of the WORK, the COUNTY may, if it so elects, eliminate the enjoined WORK pursuant to Section 4-3, "Changes," or terminate the CONTRACT.
- C. If the final judgment in the action prohibits the COUNTY from requiring CONTRACTOR to perform all or any portion of the WORK, the COUNTY will either eliminate the enjoined WORK pursuant to Section 4-3, "Changes," or terminate the CONTRACT.
- D. If the CONTRACT is to be terminated, the termination and the determination of the total compensation payable to the CONTRACTOR, shall be governed by the provisions of Section 9-8, "Termination of Contract."

8-13 DISPOSAL OF MATERIAL

CONTRACTOR may, at his option, dispose of any waste materials generated from this project, that are regularly accepted at the landfill, except hazardous materials, on site at a location directed by ENGINEER. All disposed materials shall be weighed before disposal at the YCCL scale house. CONTRACTOR must transport the materials in a vehicle approved by ENGINEER. The normal fee charged for disposal of said materials shall be waived by the COUNTY.

Full compensation for all costs involved in disposing of materials as specified in this Section 8-13, including all costs of hauling, shall be considered as included in the price paid for the CONTRACT item of WORK involving such materials and no additional compensation will be allowed therefor.

8-14 COOPERATION

Should construction be under way by other forces or by other contractors within or adjacent to the limits of the WORK specified, or should work of any other nature be under way by other forces within or adjacent to said limits, CONTRACTOR shall cooperate with all such other contractors or other forces to the end that any delay or hindrance to their work will be avoided. The right is reserved to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces.

CONTRACTOR is advised that the COUNTY has ongoing landfilling and material recycling operations. The CONTRACTOR is fully responsible for coordinating construction activities with other on-site operations. No provisions for schedule or cost adjustments shall be provided due to alleged delays or other alleged impacts arising from on-site operations activities.

The authorized representatives of the following agencies shall also have the right of access to inspect the WORK covered by these CONTRACT DOCUMENTS during the performance of this CONTRACT:

1. Regional Water Quality Control Board, Central Valley Region
2. Yolo/Solano County Air Pollution Control District
3. California Department of Resources, Recycling and Recovery
4. Yolo County Environmental Health Department
5. Other local, state, and federal agencies

These inspections shall be performed in the presence of the COUNTY. Reasonable facilities for the proper handling and inspection of the materials and WORK shall be furnished by the CONTRACTOR.

8-15 RELIEF FROM MAINTENANCE AND RESPONSIBILITY

Upon the request of CONTRACTOR, the ENGINEER may relieve CONTRACTOR of the duty of maintaining and protecting certain portions of the WORK which have been completed in all respects, in accordance with the requirements of the CONTRACT, and to the satisfaction of the ENGINEER, and thereafter, except with consent, CONTRACTOR will not be required to do further WORK thereon. In addition, such action by the ENGINEER will relieve CONTRACTOR of responsibility for injury or damage to said completed portions of the WORK resulting from use by public traffic, or from the action of the elements, or from any other cause but not from injury or damage resulting from CONTRACTOR's own operations or negligence. However, nothing in this Section 8-15 providing for relief from maintenance and responsibility, will be construed as relieving CONTRACTOR of full responsibility for making good defective WORK or materials found at any time before the formal written acceptance of the entire CONTRACT by the COUNTY or applicable warranty period pursuant to the CONTRACT or California law.

8-16 CONTRACTOR'S RESPONSIBILITY FOR THE WORK AND MATERIALS

Until the acceptance of the CONTRACT by the BOARD OF SUPERVISORS, CONTRACTOR shall have the charge and care of the WORK and of the materials to be used therein (including materials for which partial payment has been made, or materials which have been furnished by the COUNTY), and shall bear the risk of injury, loss, or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the

WORK, except as provided in Section 8-6, "Public Convenience," and Section 8-15, "Relief from Maintenance and Responsibility."

CONTRACTOR shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the WORK or the materials occasioned by any cause before its completion and acceptance, and shall bear the expense thereof. Where necessary to protect the WORK or materials from damage, the CONTRACTOR shall provide suitable drainage of any roadway and erect such temporary structures as are necessary to protect the WORK or materials from damage at no expense to the COUNTY. The suspension of the WORK from any cause whatever shall not relieve CONTRACTOR of responsibility for the WORK and materials as herein specified.

8-17 PROPERTY RIGHTS IN MATERIALS

Nothing in the CONTRACT shall be construed as vesting in CONTRACTOR any right of property in the materials used after they have been attached or affixed to the WORK or soil. All such material shall become the property of the COUNTY.

8-18 PERSONAL LIABILITY

Neither the BOARD OF SUPERVISORS, DIRECTOR, ENGINEER, nor any other officer or authorized employee of the COUNTY, shall be personally responsible for any liability arising under, or by virtue of, the CONTRACT.

SECTION 9 - PROSECUTION AND PROGRESS

9-1 BEGINNING OF WORK

After the CONTRACT has been executed, the COUNTY will issue to CONTRACTOR a written NOTICE TO PROCEED stating the first WORKING DAY of the CONTRACT. CONTRACTOR shall diligently prosecute the CONTRACT to completion within the specified time limit.

Should CONTRACTOR begin WORK in advance of receiving notice that the CONTRACT has been approved as above provided, any WORK performed in advance of the said date of approval shall be considered as having been done at CONTRACTOR's own risk and as a volunteer unless said CONTRACT is so approved.

The delivery of the CONTRACT, BONDS, and approved insurance to the COUNTY, for execution and approval, properly executed on behalf of the CONTRACTOR and surety shall constitute CONTRACTOR's authority to enter upon the site of the WORK and to begin operations, subject to assuming the risk of the disapproval of the CONTRACT, as above provided, and subject also to the following:

- A. Notice in writing of CONTRACTOR's intention to start WORK prior to approval, specifying the intended start date, shall be given to the COUNTY at least twenty-four (24) hours in advance; and
- B. CONTRACTOR shall, on commencing operations, take all precautions required for public safety and shall observe all provisions of the CONTRACT; and
- C. All WORK performed according to the CONTRACT prior to its approval under the authorization hereof, will, when the CONTRACT is approved, be considered authorized WORK and will be paid for as provided in the CONTRACT.

The CONTRACTOR shall be required to commence WORK as directed by in Section 11-5 "Prosecution and Progress".

9-2 PROGRESS SCHEDULE

CONTRACTOR shall submit to the ENGINEER a practicable critical path method progress schedule within ten (10) WORKING DAYS of the NOTICE TO PROCEED. Additionally, an updated schedule shall be provided by the CONTRACTOR at each weekly progress meeting and within ten (10) WORKING DAYS of the ENGINEER's written request at any other time.

The schedule shall show the order in which the CONTRACTOR proposes to carry out the WORK, the dates on which all salient features of the WORK will be started (including procurement of materials, plant, and equipment), and the contemplated dates for completing the said salient features, and indicating the approximate percentage of WORK scheduled for completion at any

time. The form, degree of detail, and frequency of updating the schedule shall be as instructed by the ENGINEER.

The progress schedule submitted shall be consistent in all respects with the time and order of WORK requirements of the CONTRACT. The order of the WORK shall be in a logical sequence submitted for approval by the ENGINEER prior to the start of WORK.

Project schedules will include at a minimum, the following:

1. Contract approval date
2. Procurement of special order items, i.e. control panels, pumps, etc...
3. Planned and actual start and completion date of each work activity
4. Each bid item will be considered a work activity
5. Subtasks associated with each work activity, i.e. Survey, watering, track walking, etc.
6. Final cleanup

Project schedules that are accepted by the ENGINEER, will be paid for in the progress pay estimate after the scheduled week, at the CONTRACT unit price per the bid schedule. When no bid item is provided for a progress schedule, payment for progress schedule costs shall be deemed to be included in the other bid items.

Subsequent to the time that submittal of a progress schedule is required in accordance with these SPECIFICATIONS, no progress payments will be made for any WORK until a satisfactory schedule has been submitted to the ENGINEER.

Despite the filing of a progress schedule, CONTRACTOR shall be governed by the direction of the ENGINEER in respect to specific programming when, in the judgment of the ENGINEER, it becomes necessary to accelerate the WORK or any part thereof, or cease WORK at any particular point and concentrate his forces at such other point or points, to the intent that all avoidable delays may be obviated.

9-3 TEMPORARY SUSPENSION OF WORK

The ENGINEER shall have the authority to suspend the WORK wholly or in part, for such period as deemed necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the WORK, or for such time as deemed necessary due to the failure on the part of the CONTRACTOR to carry out orders given, or to perform any provision of the CONTRACT. CONTRACTOR shall immediately comply with the written order of the ENGINEER to suspend the WORK wholly or in part. The suspended WORK shall be resumed when conditions are favorable and methods are corrected, as ordered or approved in writing by the ENGINEER.

In the event that a suspension of WORK is ordered as provided above, and should such suspension be ordered because CONTRACTOR failed to carry out orders or to perform any provision of the CONTRACT; or because weather conditions are unsuitable for performing any item or items of WORK which the ENGINEER judges could have been performed prior to such unsuitable weather had CONTRACTOR diligently prosecuted the WORK when weather was suitable; CONTRACTOR, at CONTRACTOR's expense, shall do all the WORK necessary to provide a safe, smooth, and unobstructed passageway through the construction area for use by public traffic, landfill customers, and COUNTY employees and contractors during the period of such suspension, as provided in Sections 8-6, "Public Convenience," and 8-7, "Public Safety," and as specified in the TECHNICAL PROVISIONS for the WORK. In the event that CONTRACTOR fails to perform the WORK above specified, the COUNTY will perform such WORK and the cost thereof will be deducted from money due or to become due CONTRACTOR.

In the event of a suspension of WORK under any of the conditions set forth in this Section 9-3, such suspension of WORK shall not relieve the CONTRACTOR of responsibilities specified in Section 8, "Legal Relations and Responsibility."

9-4 TIME OF COMPLETION

The CONTRACTOR shall diligently prosecute the WORK required under the CONTRACT DOCUMENTS to completion within the number of WORKING DAYS set forth in Section 11-5, "Prosecution and Progress" after the commencement of the WORK.

If any portion of a day is a legal holiday, the entire day will be considered as a non-WORKING DAY within the meaning of this Section 9-4.

Should CONTRACTOR prepare to begin WORK at the regular starting time of any day on which inclement weather, or the conditions resulting from the weather, or the condition of the WORK, prevents the WORK from beginning at the usual starting time, and the crew is dismissed as a result thereof, and CONTRACTOR does not proceed with at least Seventy-Five Percent (75%) of the normal labor and equipment force engaged in the current controlling operation, or operations, for at least Sixty Percent (60%) of the total daily time being currently spent on the controlling operation or operations, the CONTRACTOR will not be charged for a WORKING DAY whether or not conditions should change thereafter during said day, and the major portion of the day could be considered to be suitable for such construction operations.

The current controlling operation or operations are to be construed to include any feature of the WORK considered at the time by the ENGINEER and the CONTRACTOR, which, if delayed, will delay the time of completion of the CONTRACT.

Determination that a day is a non-WORKING DAY by reason of inclement weather or conditions resulting immediately therefrom shall be made and agreed upon during such day by conference between the ENGINEER and CONTRACTOR. In the event of failure to agree, CONTRACTOR will be allowed fifteen (15) DAYS from the issuance of the weekly statement of WORKING DAYS in which

to file a written protest setting forth in what respects CONTRACTOR differs from the ENGINEER; otherwise, the decision of the ENGINEER shall be deemed to have been accepted by CONTRACTOR as correct. The ENGINEER will furnish CONTRACTOR a weekly statement showing the number of WORKING DAYS charged to the CONTRACT for the preceding week, the number of WORKING DAYS of time extensions being considered or approved, the number of WORKING DAYS originally specified for the completion of the CONTRACT, and the number of WORKING DAYS remaining to complete the CONTRACT and the extended date for completion thereof, except when WORKING DAYS are not being charged in accordance with the provisions in Section 9-3, "Temporary Suspension of Work."

The COUNTY is under no obligation to consider early completion of the PROJECT and CONTRACTOR shall not, under any circumstances, receive additional compensation from the COUNTY (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the CONTRACTOR and the CONTRACT completion date.

9-5 LIQUIDATED DAMAGES

If the WORK required under the CONTRACT DOCUMENTS is not finished or completed within the CONTRACT TIME, the CONTRACTOR shall pay to the COUNTY, as fixed and liquidated damages and not as penalty, the sum set forth in Section 11-5, "Prosecution and Progress" per day for each and every DAY of delay in finishing the WORK in excess of the numbers of days prescribed. In addition to the above described liquidated damages, CONTRACTOR agrees to reimburse COUNTY for any fines or penalties issued by regulatory agencies should the CONTRACTOR fail to complete the WORK within the CONTRACT TIME.

If the WORK required under this CONTRACT is not finished or completed within the CONTRACT TIME, CONTRACTOR acknowledges and admits that damage will be sustained by the COUNTY. It is also agreed that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the COUNTY will sustain in the event of and by reason of such delay. It is therefore agreed by the parties of this CONTRACT, that CONTRACTOR will pay to the COUNTY, as fixed and liquidated damages and not as penalty, the sum set forth in Section 11-5, "Prosecution and Progress" per day for each and every DAY of delay in finishing the WORK in excess of the CONTRACT TIME. CONTRACTOR further agrees that the COUNTY may deduct the amount thereof from any money due or that may become due CONTRACTOR under the CONTRACT. Both the CONTRACTOR and the CONTRACTOR's surety shall be liable for the total amount of liquidated damages.

It is further agreed that if the WORK called for under the CONTRACT is not finished and completed in all parts and requirements within the CONTRACT TIME, the ENGINEER shall have the right to increase the number of working days or not, as they may deem best to serve the interest of the COUNTY.

CONTRACTOR's entitlement to an extension of the CONTRACT TIME is limited to a COUNTY-caused extension of the critical path, reduced by the CONTRACTOR's concurrent delays, and established by a proper time impact analysis. CONTRACTOR shall not be charged liquidated damages because of any delays in completion of the WORK due to unforeseeable causes beyond the control and without the fault or negligence of CONTRACTOR (or its SUBCONTRACTORS or suppliers). COUNTY shall ascertain the facts and extent of delay and grant extension of time for completing the WORK when, in its judgment, the facts justify such an extension. No time extension shall be allowed unless, and then only to the extent that, COUNTY-caused delay extends the critical path beyond the previously approved CONTRACT TIME.

CONTRACTOR will be granted an extension of the CONTRACT TIME for the completion of WORK caused by: acts of God or of the public enemy, fire, floods, tidal waves, earthquakes, epidemics, quarantine restrictions, strikes, labor disputes, shortage of materials, freight embargoes or other causes not the fault of and beyond the control of the COUNTY and CONTRACTOR when the WORK stopped is on the critical path; provided, that CONTRACTOR shall notify the ENGINEER in writing of the causes of delay within fifteen (15) DAYS from the beginning of any such delay. The ENGINEER shall ascertain the facts and the extent of the delay, and his findings thereon shall be final and conclusive. Such a non-compensable adjustment shall be CONTRACTOR's sole and exclusive remedy for such delays.

No extension of the CONTRACT TIME will be granted for a delay caused by a shortage of materials unless CONTRACTOR furnishes to the ENGINEER documentary proof that every effort has been made to obtain such materials, from all known sources within reasonable reach of the WORK, in a diligent and timely manner, and further proof in the form of supplementary progress schedules, as required in Section 9-2, "Progress Schedule," that the inability to obtain such materials when originally planned, did in fact cause a delay in final completion of the entire WORK, which delay could not be compensated for by revising the sequence of the CONTRACTOR's operations. The term "shortage of materials," as used in this Section, shall apply only to materials, articles, parts, or equipment which are standard items and are to be incorporated in the WORK. The term "shortage of materials," shall not apply to materials, parts, articles, or equipment which are processed, made, constructed, fabricated, or manufactured to meet the specific requirements of the CONTRACT. Only the physical shortage of material will be considered under these provisions as a cause for extension of the CONTRACT TIME. Delays in obtaining materials due to priority in filling orders will not constitute a shortage of materials. The ENGINEER shall have exclusive authority to determine if the shortage of materials constitutes a delay.

Except for the additional compensation provided for in Section 9-7, "Right-of-Way Delays," and except as provided in Public Contract Code Section 7102, CONTRACTOR shall have no claim for damage or compensation for any delay or hindrance. In no case shall the COUNTY be liable for any costs which are borne by the CONTRACTOR in the regular course of business, including, but not limited to, home office overhead and other ongoing costs.

It is the intent of the above provisions that CONTRACTOR shall not be relieved of liability for liquidated damages for any period of delay in completion of the WORK in excess of that expressly provided for in this Section 9-5.

Payment by the COUNTY of any progress payments, after the specified date of completion, shall not constitute a waiver by the COUNTY of its right to claim liquidated damages in accordance with this Section.

CONTRACTOR shall not be entitled to any extension of time unless CONTRACTOR properly notices the delay and adjustment to compensation and requests a CONTRACT CHANGE ORDER in accordance with these SPECIFICATIONS. CONTRACTOR's failure to timely and fully comply with the change order procedures shall constitute a waiver of CONTRACTOR's right to a time extension.

9-6 TERMINATION OF CONTROL

The CONTRACT may be cancelled by the COUNTY without liability for damage, when in the opinion of the COUNTY, CONTRACTOR is not complying in good faith, has become insolvent, or has assigned or subcontracted any part of the WORK without the COUNTY's consent. In the event of such cancellation, CONTRACTOR will be paid the actual amount due based on unit prices or lump sums bid for the quantity of WORK completed at the time of cancellation, less damages caused to the COUNTY by acts of CONTRACTOR causing the cancellation. CONTRACTOR, in having tendered a bid, shall be deemed to have waived any and all claims for damages because of cancellation of the CONTRACT for any such reason. If the COUNTY declares the CONTRACT cancelled for any of the above reasons, written notice to that effect shall be served upon the Surety. The Surety shall, within five (5) days, assume control and perform the WORK as successor to CONTRACTOR.

If CONTRACTOR fails to begin delivery of material and equipment, to commence WORK within the time specified, to maintain an acceptable rate of delivery of material, to execute the WORK in the manner and at such locations as specified, or fails to maintain a work program which will insure the COUNTY's interest, or, if CONTRACTOR is not carrying out the intent of the CONTRACT, the ENGINEER's written notice may be served upon CONTRACTOR and the Surety on its Faithful Performance Bond, demanding satisfactory compliance with the CONTRACT.

If CONTRACTOR or its Surety does not comply with such notice within five (5) days after receiving it, or after starting to comply, fails to continue, the COUNTY may exclude it from the premises and take possession of all material and equipment, and complete the WORK by COUNTY forces or by letting the unfinished WORK to another CONTRACTOR, or by a combination of such methods. In any event, the cost of completing the WORK shall be charged against CONTRACTOR and its Surety, and may be deducted from any money due or becoming due from the COUNTY. If the sums under the CONTRACT are insufficient for completion, CONTRACTOR or Surety shall

pay to the COUNTY within five (5) days after completion, all costs in excess of the CONTRACT PRICE.

If the Surety assumes any part of the WORK, it shall take CONTRACTOR's place in all respects for that part, and shall be paid by the COUNTY for all WORK performed by it in accordance with the CONTRACT. If the Surety assumes the entire CONTRACT, all money due to the CONTRACTOR at the time of its default shall be payable to the Surety as the WORK progresses, subject to the terms of the CONTRACT.

The provisions of this Section shall be in addition to all other rights and remedies available to the COUNTY under law. The COUNTY has the full right to pursue all of its legal and equitable remedies in regard to breach of this CONTRACT.

9-7 RIGHT-OF-WAY DELAYS

If, through an act of commission or omission by the COUNTY, CONTRACTOR sustains loss which could not have been avoided by the judicious handling of forces, equipment, and plant, CONTRACTOR shall be entitled to reasonable compensation for such part of CONTRACTOR's actual loss, which in the opinion of the ENGINEER, was unavoidable.

Actual loss shall be understood to include no items of expense other than idle time of equipment and necessary payments for idle time of workers.

Compensation for idle time of equipment will be determined in the same manner as determinations are made for equipment used in the performance of EXTRA WORK paid for on a force account basis, as provided in Section 4-4.1.1, "Labor," and no markup will be added in either case for overhead and profit.

9-8 TERMINATION OF CONTRACT

The CONTRACT may be terminated by the ENGINEER when termination is authorized by Section 8-12, "Legal Actions Against the COUNTY," or by other provisions of the CONTRACT which authorize termination. The COUNTY also reserves the right to terminate the CONTRACT at any time upon a determination by the COUNTY that termination of the CONTRACT is in the best interest of the COUNTY.

If the ENGINEER elects to terminate the CONTRACT, the termination of the CONTRACT and the total compensation payable to the CONTRACT shall be governed by the following:

9-8.1 The ENGINEER will issue contractor a written notice signed by the ENGINEER, specifying that the CONTRACT is to be terminated. Upon receipt of said written notice, CONTRACTOR will be relieved of further responsibility for damage to the WORK (excluding materials) as specified in Section 8-16, "CONTRACTOR's Responsibility for the Work and Materials," and, except as otherwise directed in writing by the ENGINEER, CONTRACTOR shall:

- 9-8.1.1 Stop all WORK under the CONTRACT except that specifically directed to be completed prior to acceptance.
- 9-8.1.2 Perform work the ENGINEER deems necessary to secure the PROJECT for termination.
- 9-8.1.3 Remove equipment and plant from the site of the WORK.
- 9-8.1.4 Take such action as is necessary to protect materials from damage.
- 9-8.1.5 Notify all subcontractors and suppliers that the CONTRACT is being terminated and that their contracts or orders are not to be further performed, unless otherwise authorized in writing by the ENGINEER.
- 9-8.1.6 Provide the ENGINEER with an inventory list of all materials previously produced, purchased, or ordered from suppliers for use in the WORK, and not yet used in the WORK, including its storage location, and such other information as the ENGINEER may request.
- 9-8.1.7 Dispose of materials not yet used in the WORK as directed by the ENGINEER. It shall be CONTRACTOR's responsibility to provide the COUNTY with good title to all materials purchased by the COUNTY hereunder, including materials for which partial payment has been made as provided in Section 10-7, "Partial Payments," and to provide bills of sale or other documents of title for such materials.
- 9-8.1.8 Subject to the prior written approval of the ENGINEER, settle all outstanding liabilities and all claims arising out of subcontracts or orders for materials terminated hereunder. To the extent directed by the ENGINEER, CONTRACTOR shall assign to the COUNTY all the right, title and interest of CONTRACTOR under SUBCONTRACTS or orders for materials terminated hereunder.
- 9-8.1.9 Furnish the ENGINEER with the documentation required to be furnished by CONTRACTOR under the provisions of the CONTRACT including all documentation required under the Federal or State requirements included in the CONTRACT, for projects for which Federal or State funds are involved.
- 9-8.1.10 Take such other actions as the ENGINEER may direct.
- 9-8.2 Acceptance of the CONTRACT as hereinafter specified shall not relieve CONTRACTOR of responsibility for damage to materials. CONTRACTOR shall continue to be responsible for damage to materials after issuance of the Notice of Termination, except as follows:
 - 9-8.2.1 CONTRACTOR's responsibility for damage to materials for which partial payment has been made as provided in Section 10-7, "Partial Payments," and for unused materials furnished by the COUNTY for use in the WORK, shall terminate when the ENGINEER certifies that such materials have been stored in the manner and at the desired locations as directed.

- 9-8.2.2 CONTRACTOR's responsibility for damage to materials purchased by the COUNTY, subsequent to the issuance of the notice that the CONTRACT is to be terminated, shall terminate when title and delivery of such materials has been taken by the COUNTY.
- 9-8.2.3 After determining that CONTRACTOR has completed the WORK under the CONTRACT, which WORK was directed to be completed prior to termination, and such other WORK as may have been so ordered to secure the project for termination, the ENGINEER will recommend that the COUNTY formally accept the CONTRACT. Immediately upon and after such acceptance by the COUNTY, CONTRACTOR will not be required to perform any further work thereon and shall be relieved of any contractual responsibilities for injury to persons or property which occurs after the formal acceptance of the project by the COUNTY.
- 9-8.3 Termination of the CONTRACT shall not relieve the Surety of its obligation for any just claims arising out of the WORK performed.
- 9-8.4 The total compensation to be paid to CONTRACTOR shall be determined by the ENGINEER on the basis of the following:
- 9-8.4.1 The reasonable cost to CONTRACTOR, without profit, for all WORK performed under the CONTRACT, including mobilization, demobilization, and WORK performed to secure the project for termination. In determining the reasonable cost, deductions will be made for the cost of materials to be retained by CONTRACTOR, amounts realized by the sale of materials, and for other appropriate credits against the cost of the WORK. Reasonable cost will include a reasonable allowance for project overhead and general administrative overhead not to exceed a total of seven (7) percent of direct costs of such WORK.
- When, in the opinion of the ENGINEER, the cost of a CONTRACT item of WORK is excessively high due to costs incurred to remedy or replace defective or rejected WORK, the reasonable cost to be allowed will be the estimated reasonable cost of performing such WORK in compliance with the requirements of the PLANS and SPECIFICATIONS. The excessive actual cost shall be disallowed.
- 9-8.4.2 A reasonable allowance for profit on the cost of the WORK performed as determined under Subsection (1), provided CONTRACTOR establishes, to the satisfaction of the ENGINEER, that it is reasonably probable that CONTRACTOR would have made a profit, had the CONTRACT been completed. The profit allowed shall in no event exceed four (4) percent of cost.
- 9-8.4.3 The reasonable cost to CONTRACTOR of handling material returned to the vendor, which material was delivered to the COUNTY or otherwise disposed of, as directed by the ENGINEER.
- 9-8.4.4 A reasonable allowance for CONTRACTOR's administrative costs in determining the amount payable due to termination of the CONTRACT.

9-8.5 All records of CONTRACTOR and SUBCONTRACTORS, necessary to determine compensation in accordance with the provisions of this Section, shall be open to inspection or audit by representatives of the COUNTY, at all times after issuance of the notice that the CONTRACT is to be terminated. Such records shall be retained and kept open for inspection or audit for a period of three (3) years.

9-8.6 After acceptance of the WORK by the COUNTY, the ENGINEER may recommend payments on the basis of interim estimates, pending issuance of the Final Estimate, in accordance with Section 10-9.1, "Final Payment and Claims," provided that in the ENGINEER's opinion, the amount thus paid together with all amounts previously paid or allowed, will not result in total compensation in excess of that to which CONTRACTOR will be entitled. All payments, including payment upon the Final Estimate, shall be subject to deduction for prior payments and amounts, if any, to be kept or retained under the provisions of the CONTRACT.

9-8.7 The provisions of this Section 9-8 shall be included in all SUBCONTRACTS.

9-9 COUNTY'S RIGHT TO TAKE POSSESSION OF THE WORK IN WHOLE OR IN PART

It is agreed that the COUNTY has the right, at any time, to enter upon the premises of the WORK and perform work not covered by this CONTRACT, either by day labor or by direct contract with other contractors, or to occupy and use a portion of the premises prior to the date of the final acceptance of the WORK as a whole, without in any way relieving the CONTRACTOR of any obligations under this CONTRACT.

Such use or occupation of the premises shall not be construed as an acceptance of any portion of the WORK under this CONTRACT.

SECTION 10 - MEASUREMENT AND PAYMENT

10-1 MEASUREMENT OF QUANTITIES

Payment for all WORK bid at a price per unit of measurement will be based upon the actual quantities of work as measured upon completion. The COUNTY does not expressly or by implication agree that the actual amount of work or materials of any class will correspond to the estimated quantities given in the PROPOSAL. CONTRACTOR shall make no claim nor receive any compensation for anticipated profits, for loss of profit, for damages, or for any extra payment whatever because of any difference between the amount of WORK actually done or materials furnished and the estimated amount.

All work to be paid for at a CONTRACT price per unit of measurement will be measured by the ENGINEER in accordance with United States Standard Measures. A ton shall consist of 2,000 pounds avoirdupois.

CONTRACTOR shall bear the expense of and make all arrangements for the measurement of materials paid for by weight.

All weighing, measuring, and metering devices used to measure the quantity of materials used in the WORK shall be suitable for the purpose intended, and shall conform to the tolerances and specifications as outlined in Title 4, Chapter 8 of the California Administrative Code, and these SPECIFICATIONS.

Whenever pay quantities of material are determined by weighing, the scales shall be operated by a weighmaster licensed in accordance with the provisions of the California Business and Professions Code, Division 5, Chapter 7. Upon request by the ENGINEER, CONTRACTOR shall furnish a Public Weighmaster's Certificate, or a Private Weighmaster's Certificate, or certified daily summary weigh sheets. A representative of the COUNTY may, at the discretion of the ENGINEER, be present to witness the weighing and to check and compile the daily record of such scale weights.

The operator of each vehicle weighed shall obtain a weight or load slip from the weighmaster and deliver said slip to the ENGINEER at the point of delivery of the material.

Vehicles used to haul material being paid for by weight shall be weighed empty daily, and at such additional times as the ENGINEER may direct. Each vehicle shall bear a plainly legible identification mark.

Quantities of material wasted, or disposed of, in a manner not called for under the CONTRACT; or rejected loads of material, including material rejected after it has been placed by reason of failure of CONTRACTOR to conform to the provisions of the CONTRACT; or material not unloaded from the transporting vehicle; or material placed outside of the lines indicated on the PLANS or established by the ENGINEER; or material remaining on hand after completion of the WORK; will

not be paid for and such quantities will be deducted from the final total quantities. No compensation will be allowed for hauling and disposing of rejected material.

Full compensation for all expenses involved in conforming to the requirements specified in this Section shall be considered as included in the unit prices paid for the materials being measured or weighed, and no additional compensation will be allowed therefor.

10-2 SCOPE OF PAYMENT

Whenever it is specified that CONTRACTOR is to do work or furnish materials of any class for which no price is fixed in the proposal, it shall be understood that he is to do such work or furnish such materials without extra charge or allowance or direct payment of any kind. The cost of doing such work or furnishing such materials is to be included in the price bid for such other items of WORK as he may consider appropriate, unless it is expressly specified in the CONTRACT DOCUMENTS that such work or materials is to be paid for as EXTRA WORK.

CONTRACTOR shall accept the compensation provided in the CONTRACT as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to the completed WORK and for performing all WORK contemplated and embraced under the CONTRACT; also for loss or damage arising from the nature of the WORK, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the WORK until acceptance by the COUNTY; and for all risks of every description connected with the prosecution of the WORK; and for all expenses incurred in consequence of the suspension or discontinuance of the WORK as provided in the CONTRACT; and for completing the WORK according to the PLANS and SPECIFICATIONS. Neither the payment of any estimate nor of any retained percentage shall relieve CONTRACTOR of any obligation to make good any defective WORK or material.

No compensation will be made in any case for loss of anticipated profits. No compensation will be made in any case for materials delivered to site but not installed.

10-3 RESERVED

10-4 RESERVED

10-5 RESERVED

10-6 STOP NOTICES

The COUNTY, by and through the ENGINEER or other appropriate COUNTY officer or officers, may at its option and at any time retain out of any amounts due CONTRACTOR, sums sufficient to cover claims filed pursuant to Section 9350 et seq. of the Civil Code.

10-7 PARTIAL PAYMENTS

The BOARD OF SUPERVISORS, once in each month, shall cause an estimate in writing to be made by the ENGINEER. The estimate shall include the total amount of WORK done to date and acceptable materials incorporated into the WORK.

The COUNTY shall retain a percentage of the estimated value of the WORK done and acceptable materials incorporated into the WORK as partial security for the fulfillment of the CONTRACT by CONTRACTOR set forth in Section 11-21 "Payment Retention".

The ENGINEER shall show on the estimate the balance of the amount due CONTRACTOR, at the time of the estimate, less all previous payments and all sums to be kept or retained under the provisions of the CONTRACT.

CONTRACTOR shall, upon receipt of the estimate, submit to the ENGINEER for payment, an invoice reflecting the balance shown on the estimate. Upon receipt, the ENGINEER shall review the payment request to determine whether it is undisputed and suitable for payment. If the payment request is determined to be unsuitable for payment, it shall be returned to CONTRACTOR as soon as practicable but not later than seven (7) DAYS after receipt, accompanied by a document setting forth in writing the reasons why the payment request is not proper. The COUNTY shall make the progress payment within thirty (30) DAYS after the receipt of an undisputed and properly submitted payment request from CONTRACTOR, provided that a release of liens and claims has been received from the CONTRACTOR pursuant to Civil Code section 8132. The number of days available to the COUNTY to make a payment without incurring interest pursuant to this paragraph shall be reduced by the number of days by which the ENGINEER exceeds the seven (7) day requirement.

No such estimate or payment shall be required to be made when, in the judgment of the ENGINEER, the WORK is not proceeding in accordance with the provisions of the CONTRACT, or the total value of the WORK done since the last estimate amounts to less than \$300.

The COUNTY may withhold a sufficient amount or amounts of any payment or payments otherwise due to CONTRACTOR, as in his judgment may be necessary to cover:

Payments which may be past due and payable for just claims against CONTRACTOR or any SUBCONTRACTORS for labor or materials furnished in and about the performance of work on the PROJECT under this CONTRACT.

Defective work not remedied.

Failure of CONTRACTOR to make proper payments to its SUBCONTRACTOR or for material or labor.

Completion of the CONTRACT if there is a reasonable doubt that the WORK can be completed for balance then unpaid.

Damage to another contractor or a third party.

Amounts which may be due the COUNTY for claims against CONTRACTOR.

Failure of CONTRACTOR to keep the record ("as-built") documents up to date.

Failure to provide update on construction schedule as required herein.

Site cleanup.

Failure to comply with CONTRACT DOCUMENTS.

Liquidated damages.

Legally permitted penalties.

No such estimate or payment shall be construed to be an acceptance of any defective WORK or improper materials. Attention is directed to the express prohibition against payment to unlicensed contractors contained in Government Code Section 14311.5, the provisions of which are set forth in Section 8-1.8, "Contractor's Licensing Law."

10-8 SUBSTITUTION OF SECURITIES FOR WITHHELD MONEY

Pursuant to Public Contract Code Section 22300, at the request and expense of CONTRACTOR, securities equivalent to the amount withheld shall be deposited with the COUNTY, State Treasurer, or with a State or Federally chartered bank in California, as the escrow agent, who shall pay such monies to CONTRACTOR upon satisfactory completion of the CONTRACT.

Alternatively, CONTRACTOR may request pursuant to Public Contract Code Section 22300, and the COUNTY shall make payment of retentions earned directly to the escrow agent. CONTRACTOR shall receive the interest earned on the investments upon the same terms provided for in this Section for securities deposited by CONTRACTOR. Upon satisfactory completion of the CONTRACT, CONTRACTOR shall receive from the escrow agent all securities, interest, and payments received by the escrow agent from the COUNTY.

Securities eligible for investment under this Section shall include those listed in Government Code Section 16430, or bank, savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by CONTRACTOR and the COUNTY.

CONTRACTOR shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon.

Any escrow agreement entered into pursuant to this Section shall be substantially similar to the form provided by Public Contract Code Section 22300(f).

10-9 PAYMENT AFTER ACCEPTANCE

After the WORK has been accepted by the COUNTY as provided in Section 6-9, "Final Inspection, Field Acceptance and Acceptance by the Board," payments will be made to CONTRACTOR subject to the provisions in that Section.

10-9.1 FINAL PAYMENT AND CLAIMS

After acceptance by the BOARD OF SUPERVISORS, ENGINEER will prepare a proposed final estimate, in writing, of the total amount payable to CONTRACTOR. This final estimate will include an itemization of the final CONTRACT amount, segregated as to CONTRACT item quantities, change order work and any other basis for payment. It will show therein all deductions made or to be made, for prior payments, and amounts to be kept or retained under the provisions of the CONTRACT. All prior estimates and payments shall be subject to correction in the proposed final estimate.

The COUNTY shall file a Notice of Completion with the County Recorder's Office after acceptance of the CONTRACT.

Within five (5) DAYS after acceptance of the CONTRACT, CONTRACTOR shall submit to the ENGINEER written approval of said proposed final estimate or a written statement of all claims arising under or by virtue of the CONTRACT. No claim will be considered that was not included in said written statement of claims, nor will any claim be allowed for which a notice or protest is required by these SPECIFICATIONS unless CONTRACTOR has complied with the Notice of Protest requirements in said Section.

Upon CONTRACTOR's approval, or failure to file a claim within said period of five (5) DAYS, the proposed final estimate submitted to the CONTRACTOR shall become the final estimate, and within thirty (30) DAYS thereafter, the COUNTY will pay the entire sum so found to be due, provided that a release of liens and claims has been received from the CONTRACTOR pursuant to Civil Code section 8136. Such final estimate and payment thereon shall be conclusive and binding against both parties to the CONTRACT, on all questions relating to the amount of WORK done and the compensation payable therefor, except as otherwise provided in Sections 10-4-2, "Records," and 10-10, "Clerical Errors."

If CONTRACTOR within said period of five (5) DAYS files claims, the COUNTY shall make payment based on the proposed final estimate, pending final determination by the ENGINEER, regarding said claims as provided in this Section 10-9.

The claims filed by CONTRACTOR shall be in sufficient detail to enable the ENGINEER to ascertain the basis and amount of said claims. The ENGINEER will consider and determine CONTRACTOR's claims. CONTRACTOR must furnish within a reasonable time such further information and details as may be required, by the ENGINEER, to determine the facts or contentions involved in the

claims. Failure to submit such information and details will be sufficient cause for denying the claims.

The ENGINEER will make the final determination of any claims which remain in dispute after a completion of a claim's review. CONTRACTOR may meet with the ENGINEER to make a presentation in support of such claims.

Upon final determination of the claims, the ENGINEER shall then make and issue a final estimate in writing. Within thirty (30) DAYS thereafter the COUNTY will pay the entire sum, if any, found due thereon, provided that a release of liens and claims has been received from the CONTRACTOR pursuant to Civil Code section 8136. Such final estimate shall be conclusive and binding against both parties to the CONTRACT, on all questions relating to the amount of WORK done and the compensation payable therefor, except as otherwise provided in Sections 10-4.2, "Records," and 10-10, "Clerical Errors." No payments, however, final or otherwise, shall operate to release CONTRACTOR or its sureties from the BONDS, or from any other obligation under this CONTRACT.

10-10 CLERICAL ERRORS

Notwithstanding the provisions in Section 10-9, "Payment After Acceptance," for a period of three (3) years after acceptance of the WORK, all estimates and payments made pursuant to said Section 10-9, including the final estimate and payment, shall be subject to correction and adjustment for clerical errors in the calculations involved in the determination of quantities and payments. CONTRACTOR and the COUNTY agree to pay to the other any sum due under the provisions of this Section 10-10, provided, however, if the total sum to be paid is less than Two Hundred Dollars (\$200.00), no such payment shall be made.

PART 2 - SPECIAL PROVISIONS

SECTION 11 - SPECIAL PROVISIONS

11-1 PROJECT

General work description:

Contractor to remove and properly dispose of existing roofing system down to roof deck in designated areas on roof plans approximately 200 square feet, remove all existing wall, curb flashings and existing walking pads. Remove / Replace existing roof deck in areas that show evidence of dry rot, infill area to match existing roof elevation. Clean and prep existing substrate to receive new substrate. Mechanically attach ¼" Recovery Board, fully adhere new specified 60 mil PVC roof membrane with new associated sheet metals, new receiver/removable counter flashings at base of metal parapet walls roof area A1, new coping caps, trim, and expansion joints metal. Existing electrical/gas/condensate lines are to be installed at new roof elevations on specified pipe supports if new existing line needs to be raised to properly fit new support height minimum 6" with protection pads. Contractor to remove and properly dispose of existing T-111 siding at vertical parapet walls at area B1 of the County Morgue. Install new 36" wide R paneling with non-concealed fasteners as per manufacturers specifications.

Alternate "A" Proposal: County Morgue

Contractor to remove and properly dispose of existing T-111 siding at vertical parapet walls. Install new 16" wide meridian paneling with concealed fasteners as per manufacturers specifications.

Alternate "B" Proposal:

Contractor to give a price per square foot to remove and install ¾" plywood substrate if needed. Base bid includes 200 square feet already. This is in case there is unforeseen water damage.

Normal operating hours are Monday through Saturday 6:30 a.m. to 4:00 p.m., and Sunday 8:00 a.m. to 4:00 p.m. The work to be performed under this contract consists of furnishing all equipment, materials, and tools; performing all required labor; and completing all work necessary for the construction of the following:

11-2 PROJECT LOCATION AND ACCESS

The PROJECT is located at 2500 E. Gibson Road, Woodland, CA 95776 and/or 140 Tony Diaz Drive, Woodland, CA 95776

Normal operating hours are Monday through Saturday 6:30 a.m. to 4:00 p.m., and Sunday 9:00 a.m. to 5:00 p.m.

As a COUNTY facility, any Work must follow Yolo County Code of Ordinances (see <https://www.yolocounty.org/general-government/board-of-supervisors/county-code>). The COUNTY is directing attention to the following COUNTY Ordinances while working within the Facility:

- Section 6-18.003 Prohibition of smoking in county buildings, on county property, and enclosed public places.

11-3 RESERVED

11-4 SUBMISSION OF BIDS AND AWARD OF CONTRACT

Submission of a PROPOSAL and award of CONTRACT shall be in accordance with Sections 2 and 3 of the GENERAL PROVISIONS except as amended herein.

Section 2-8 of the GENERAL PROVISIONS shall be amended such that satisfactory evidence shall be defined to include: financial stability, technical ability and experience.

Additionally, for bids in excess of seven hundred fifty thousand (\$750,000) dollars the CONTRACTOR must provide proof to show compliance with Section 8-1.5.

SUBCONTRACTORS may be used to satisfy any of these requirements. The SUBCONTRACTORS used and their experience shall be noted on the PROPOSAL.

Section 2-3, paragraph 2, of the General Provisions shall be deleted, and replaced by the following: “The PROPOSAL, BOND FORMS, and CONTRACT AGREEMENT are bound separately from the NOTICE TO CONTRACTORS, GENERAL PROVISIONS, SPECIAL PROVISIONS, and PLANS. No part of the PROPOSAL, BOND FORMS, and CONTRACT AGREEMENT booklet shall be detached therefrom. The page numbers of each bound document are numbered sequentially, and by

submitting his PROPOSAL, the CONTRACTOR certifies that he has received and reviewed all pages.”

Section 2-4 of the General Provisions shall be amended to include the following sentence: “The COUNTY reserves the right to reject any or all bids.”

11-5 PROSECUTION AND PROGRESS

The CONTRACTOR'S attention is directed to Section 9, "Prosecution and Progress," of the GENERAL PROVISIONS of the SPECIFICATIONS.

The CONTRACTOR shall be required to commence WORK under this CONTRACT within 30 CALENDAR DAYS after the date of receipt by the CONTRACTOR of NOTICE TO PROCEED. In addition to commencing WORK within 30 CALENDAR DAYS, the CONTRACTOR shall furnish within 30 CALENDAR DAYS after receiving NOTICE TO PROCEED to the ENGINEER a statement(s) from the vendor(s) that the BEGINNING OF WORK ORDERS required for this CONTRACT has been received and accepted by said vendor(s).

The CONTRACTOR shall diligently prosecute the CONTRACT to completion 30 WORKING DAYS after the commencement of the WORK.

If the WORK required under this CONTRACT is not finished or completed within 30 WORKING DAYS after the commencement of the WORK, taking into consideration any period of delay authorized by the ENGINEER or pursuant to a duly authorized CONTRACT CHANGE ORDER, the CONTRACTOR shall pay to the COUNTY, as fixed and liquidated damages and not as penalty, the sum of \$500 per day for each and every WORKING DAY delay in finishing the WORK in excess of the CONTRACT TIME.

11-6 ORDER OF WORK

The CONTRACTOR must perform WORK in a logical sequence submitted for approval by the ENGINEER prior to the start of WORK.

11-7 LABOR SURCHARGE

Section 4-4.1.1B of the GENERAL PROVISIONS shall be amended to include the following:

The labor surcharge referenced in Section 4-4.1.1 B of the GENERAL PROVISIONS to be used in Force Account payments shall be fifteen (15) percent for regular time and fifteen (15) percent for overtime.

11-8 PROGRESS SCHEDULE

Section 9-2 of the GENERAL PROVISIONS of these SPECIFICATIONS shall be amended such that all items of WORK are considered salient and as such shall be addressed in the progress schedule with dates on which items of WORK are anticipated to start and contemplated completion dates.

11-9 SURVEYS, LINES, AND GRADES

When applicable, the CONTRACTOR shall be responsible for survey work for the layout of work features and the performance of the WORK. Field measurements of WORK quantities for payment purposes and construction record as-built topographic maps shall be conducted by a third party surveying firm contracted and paid by the COUNTY.

The CONTRACTOR reserves the right to perform any desired checking of COUNTY’S surveys and request correction if necessary, but this shall not relieve the CONTRACTOR of the responsibility for adequate performance of the WORK.

The CONTRACTOR shall be responsible for (1) any lines, grades, or measurements which do not comply with specified or proper tolerances, or which are otherwise defective and (2) any resultant defects in the WORK.

When the SPECIFICATIONS require bid schedule items of WORK to be measured by surveying methods, the COUNTY shall be responsible for performing the surveys before and after the work. All surveys for pay quantities shall be performed by a California-licensed land surveyor. The ENGINEER shall calculate final quantities for payment purposes. The CONTRACTOR shall be responsible for notifying the ENGINEER in advance when third party surveying is required.

The third-party surveyor shall perform construction record as-built topographic surveys of the construction area immediately prior to the start of the WORK and at the completion of the Yolo County Service Area Six Gravel Roadway Project, and final acceptance. The construction record as-built surveys shall be performed at a maximum 50-foot grid with elevations also taken at grade breaks. The CONTRACTOR shall notify the CQA Monitor seventy-two (72) hours in advance of areas that will require surveying. The CONTRACTOR shall include in his schedule sufficient time to complete the surveying. No claims for extra costs or delays shall be made for standard surveying conducted to determine compliance with the SPECIFICATIONS.

The tolerances generally applicable in setting survey stakes shall be as set forth below. Such tolerances shall not supersede stricter tolerances required by the PLANS or SPECIFICATIONS, and shall not otherwise relieve the CONTRACTOR of responsibility for measurements in compliance

therewith. The CONTRACTOR shall provide local construction control points prior to any excavation and earthwork. These points shall be field-verified by a third party surveyor.

11-10 SITE FACILITIES

The COUNTY'S existing facilities shall not be available to the CONTRACTOR. CONTRACTOR shall provide and maintain office space, sanitary and any other facilities necessary. Facilities supplied by the CONTRACTOR shall be in compliance with all applicable regulations and laws.

The COUNTY shall make available an area of land near the PROJECT site for the CONTRACTOR to park equipment, store materials, and locate a site office, if the CONTRACTOR desires. The exact location shall be determined by the ENGINEER. Access, security measures, and utilities shall be the responsibility of the CONTRACTOR. The CONTRACTOR shall clean the area so used and return it to its original condition, or better.

11-11 SITE UTILITIES

A source for electrical power shall be provided by the CONTRACTOR. However, in the event that portable electric generators are required, the CONTRACTOR shall provide a protective lining and splash pad large enough to catch spilled fuel under the electric generator and its fuel storage area (as approved by the ENGINEER). All fuel spills shall be cleaned up in accordance with County, State, and Federal guidelines.

The COUNTY shall provide a water supply as required for the WORK. The COUNTY shall permit the CONTRACTOR to use water obtained from an existing water storage reservoir.

11-12 DUST CONTROL

The CONTRACTOR shall be responsible for providing adequate dust control measures in the entire WORK area during the term of the CONTRACT. Dust palliatives shall not be used without written authorization of the ENGINEER.

Dust control shall consist of furnishing water, required equipment, additives, accessories, and incidentals, and carrying out proper and efficient measures wherever and as often as necessary to reduce dust nuisances, and to prevent dust originating from construction operations during the completion of the CONTRACT, as required by the COUNTY/ENGINEER.

No separate payment shall be made for any work performed or material used to control dust resulting from the CONTRACTOR'S performance of the WORK, either inside or outside the right of way. Full compensation for such dust control shall be considered as included in the prices paid for the various items of WORK involved.

11-13 TRAFFIC CONTROL

No work that would require a lane closure shall be performed with the exceptions set forth by the ENGINEER.

The CONTRACTOR shall submit to the COUNTY, for approval, a traffic plan. At a minimum the traffic plan shall include the following:

1. Traffic flow pattern, including CONTRACTOR'S equipment and public traffic flow patterns;
2. Alternate routes for CONTRACTOR'S equipment and/or traffic;
3. Times of day and schedule for traffic operations;
4. Locations of signs and traffic control devices and their types (if required); and
5. Number and location of flag persons (if required).

11-14 EXISTING IMPROVEMENTS

The CONTRACTOR'S attention is directed to Sections 8-9, "Preservation of Property," and 8-10, "Responsibility for Damage," of the GENERAL PROVISIONS.

The CONTRACTOR'S attention is also directed to the PLANS which indicate the location of existing observation wells, extraction wells, sprinklers, survey monuments, paved roads, ground-water monitoring wells on the project site, etc.; which are to be protected from damage.

The CONTRACTOR shall be responsible for the repair or replacement of any existing facilities and equipment damaged by the CONTRACTOR'S personnel, equipment, SUBCONTRACTORS, or material SUPPLIERS.

11-15 RESERVED

11-16 RESERVED

11-17 RESERVED

11-18 RESERVED

11-19 DIVERSION AND CONTROL OF WATER

No separate payment shall be allowed for the diversion and control of surface water. All costs incidental to maintaining dry working areas shall be included in the unit prices paid for other items of WORK in the PROPOSAL.

11-20 COORDINATION OF WORK

Section 8-14 of the GENERAL PROVISIONS shall be amended to include the following:

The CONTRACTOR is fully responsible for coordinating activities with COUNTY, including but not limited to: construction staging and material storage areas, material delivery, site access, utilization of on-site water, traffic control. No provisions for schedule or cost adjustments shall be provided by the COUNTY due to alleged delays or other alleged impacts arising from nearby activities. The COUNTY may extend the CONTRACT TIME or award non-working days if delays are caused by concurrent projects.

11-21 PAYMENT RETENTION

The second paragraph of Section 10-7 of the GENERAL PROVISIONS shall be replaced by the following:

The COUNTY shall retain five (5) percent of the estimated value of WORK done and acceptable materials incorporated into the WORK as a partial security for the fulfillment of the CONTRACT by the CONTRACTOR.

11-22 PROJECT FUNDING

Funding for this PROJECT is provided below:

Funding Source	Percentage of Funding
Yolo County ACO Fund	100%
California State Grant	0%
Federal Grant	0%

11-23 TERM AND TERMINATION

For COUNTY accounting purposes only, this CONTRACT shall terminate when a Notice of Completion is filed with the County Recorder of Yolo County and all payments have been made to the CONTRACTOR, and in no event later than 6/30/22. Notwithstanding the foregoing, any and all representations, warranties, indemnifications, and guarantees made in, required by, or given in accordance with the CONTRACT DOCUMENTS, as well as all continuing obligations under the CONTRACT DOCUMENTS or law, shall survive final payment, completion, and acceptance of the WORK or termination or completion of the AGREEMENT.

11-24 RESERVED

PART 3 - TECHNICAL PROVISIONS

Bound Separately

PART 4 - PROPOSAL AND **CONTRACT**

Bound Separately

PART 5 - PROJECT DRAWINGS

Bound Separately

PART 6 - CONSTRUCTION QUALITY **ASSURANCE PLAN**

Bound Separately

Exhibit F

madsen

ROOFING & WATERPROOFING, INC.

Change Order No. 1

Date: September 7, 2021 From: David Patton

Customer No.: _____ Customer Name: Yolo County District

Job No.: _____ Job Name: Yolo Sheriffs Admin & Morgue Reroof Project

Description of Modification

Items below not included in the base bid.

1. Remove approximately 235 square feet of asbestos containing mastics throughout the roof walls and curb base flashings.

Change to Completion Date Yes No New Completion Date _____

1.	Asbestos Removal	\$6,420.00
2.		
3.		
4.		
Grand Total		\$6,420.00

Customer hereby (1) approves the modifications set forth in this Change Order, (2) directs Madsen Roofing & Waterproofing, Inc. to proceed with the modifications, (3) agrees to the adjustment price, set forth above, if any, and (4) agrees to the change in time of performance set forth above, if any. All terms of the underlying contract for which this Change Order has been issued shall apply to this Change Order except as specifically set forth above.

MADSEN ROOFING & WATERPROOFING, INC.

By: Christian Madsen
Christian Madsen, President

CUSTOMER
By: [Signature]
Name: Kevin Yarbous Title: Director GSI