

SECTION 8

8-1 DESCRIPTION OF WORK

8-1.01 DESCRIPTION -- The work to be done is at Main (2nd floor roof) Roof Area with Penthouses and Lower (1st floor areas) Roof Areas.

The work mainly consists of the removing and disposing of existing gravel surfaced asphalt built-up roof system. Adhered Thermoplastic-PVC Membrane Roof System: 72-mil G410 Feltback Membrane installed over ¼" DensDeck Prime cover board and properly prepared Structural Concrete or Lightweight Insulating Concrete Roof deck substrate. Remove existing sky light and install new skylight; Install Bilco Type "S" Roof Hatch (36"x30" Paint Bond Steel); Install new "Sarnadrain w/ U-Flow" Retrofit Drain (4"); Install new Sarnatred-V Walk Tread (Light Gray); Repair/Replace damaged Lightweight Insulating Concrete 6.5" Thick.

The removal and replacement of roof and sky light shall be included as required by CITY inspection and approval of a functioning system, and such other items or details, not mentioned above, that are required by the Plans, Standard Specifications, or these Special Provisions shall be performed, placed, constructed or installed.

The work to be done shall include furnishing all materials, equipment, tools, labor, taxes and incidentals as required by the Contract Documents to construct the project.

Addenda issued during the time of bidding shall become a part of the documents furnished to all bidders for the preparation of bids, shall be covered in the bids, and shall be made a part of the contract. Each Bid shall include specific acknowledgement in the space provided of receipt of all Addenda issued during the bidding period. Failure to so acknowledge Addenda may result in the Bid being rejected as not responsive.

8-1.02 ORDER OF WORK -- The first order of work shall be to place the order for the product and material. **Within one (1) week of the notification of award, the Contractor shall furnish the Engineer with a statement from the vendor that the order for said product/material has been received and accepted by the vendor.** All other works shall be considered second order of work.

8-1.03 CLEAN UP AND DUST CONTROL -- Clean up and dust control shall conform to provisions in Section 7-8.1, "Clean Up and Dust Control", of the Standard Specifications.

✓ The Contractor shall water down the site during periods of high winds as directed by the Engineer, including periods when the work is not actually in progress. Failure to respond to a directive to water the site in a prompt manner will result in the City making other arrangements to have this item of work done and the costs billed to the Contractor, or it shall be paid for by the Contractor as a deduction from his contract.

8-1.04 PROJECT LOCATIONS -- Locations within the CITY to be provided following Award of Project.

8-1.05 GEOTECHNICAL INVESTIGATION -- None

8-1.06 APPROVED MATERIALS -- Whenever the expression “or approved equal” is used, it shall be taken to mean the approval by the City Engineer of any substitution of material or material specified herein. All substitution requests shall state the reason for the request and the difference in price between the item specified and the requested substitution.

All substitution requests shall be submitted to the City Engineer in writing **eight (8) working days** prior to the bid opening. No requests for substitutions will be considered by telephone.

The Contractor shall submit to the Engineer for review and approval six (6) copies of all shop drawings.

The Contractor shall make any corrections to shop drawings required by the Engineer.

8-1.07 CITY-FURNISHED MATERIALS -- CITY furnished material, when applicable as specified in other sections of these Special Provisions, shall comply with the following:

- A. Materials, if furnished by the CITY, will be made available as specified in these Specifications. The Contractor is responsible for loading, unloading, hauling and handling, and placing CITY-furnished materials.
- B. The Contractor shall inspect and assure itself of the amount and soundness of such materials.
- C. The Contractor will be held responsible for all materials furnished to it, and shall pay all demurrage and storage charges. CITY-furnished materials that are lost or damaged from any cause whatsoever shall be replaced by the Contractor. The Contractor will be liable to the CITY for the cost of replacing CITY-furnished material and such costs may be deducted from any monies due or to become due the Contractor.

8-1.08 PRE-BID INQUIRIES -- **NO ORAL** representations or interpretations will be made to any Bidder as to the meaning of the Specifications, Plans, any addenda, or other Contract Documents. Written requests for an interpretation, or to identify a potential omission, discrepancy, or misunderstanding will be accepted if received by 5:00 p.m. of the **6th working day** prior to the day of the proposed bid opening.

If there are any questions regarding this project, please contact:

City Engineer's Office
San Bernardino City Hall
300 North "D" Street, 3rd Floor
San Bernardino, CA 92418

**SUBJECT: ROOF REPLACEMENT
AT NORMAN F. FELDHEYM CENTRAL LIBRARY
IN THE CITY OF SAN BERNARDINO
PLANS & SPECIAL PROVISIONS NO. 13069**

Attention: Saba Engineer, P.E. Principal Civil Engineer
Tel: (909) 384-5284
E-mail: engineer_sa@sbcity.org

Or

Attention: Mirela Grigorescu
Tel: (909) 384-5202; Fax: (909) 384-5190
E-mail: grigorescu_mi@sbcity.org

SECTION 8A

**ADHERED THERMOPLASTIC (PVC) FELTBACK
MEMBRANE ROOFING**

**2-3/4" INSULATED TRANSLUCENT FIBERGLASS
SANDWICH PANEL SKYLIGHT SYSTEM**

ADHERED THERMOPLASTIC (PVC) FELTBACK MEMBRANE ROOFING

PART 1 – GENERAL CONDITIONS

1.1 DESCRIPTION

A. Summary:

Install an adhered thermoplastic (PVC) feltback membrane roof system, including, but not limited to, removal of existing roof system, primed gypsum cover board, PVC membrane flashings, PVC metal edge/fascia flashing, and other components to comprise a weathertight roof system. The roof system shall comply with the herein specified roofing manufacturer's standard written and detail requirements. Note: Sika Sarnafil products and system installation requirements have been utilized as the basis of design for this project.

B. System Description:

1. Remove and dispose of existing roof system; including all vertical baseflashings, pitch-panels and applicable metal down to the lightweight insulating concrete (LWIC) roof deck substrate. All removal, hauling, and disposal procedures must be performed by a certified contractor and must meet or exceed all applicable Local and State requirements. Existing sheet metal parapet wall cap flashing and sheet metal counter-flashing shall be removed with care and reused (reinstalled) upon completion of the PVC membrane flashings.
2. As applicable, asbestos containing materials (ACM) are present in those components and areas of the building subject to the work of this project. The scope of the asbestos removal work shall be as required to comply with Local, State, and Federal regulations and standards. The Applicator shall obtain and pay for all licenses and permits associated with all asbestos work. The Applicator shall provide to the City of San Bernardino Representative copies of all permits, certificates, and other related documents pertaining to the asbestos removal work.
3. As identified by the City of San Bernardino Representative, remove and dispose of all non-usable roof vents, applicable curbs and abandoned roof penetrations. Repair and/or replace roof deck substrate to match existing in accordance with Local building code requirements. Deck replacement shall match the same size and type as that of existing deck.
4. At all existing Equipment Curb and Roof Hatch locations without crickets on the upslope side and with an upslope dimension larger than 35", install tapered isocyanurate roof insulation crickets. The cricket slope shall be two times the primary roof deck slope and adhered in place with low-rise foam insulation adhesive at a rate not less than 12" on-center, 1/4" to 1/2" wide ribbon spacing and in accordance with FM 1-90 uplift resistance requirements.

5. Over the properly prepared LWIC roof deck, install a layer of 1/4" thick gypsum cover board with fiberglass mat facer. The cover board shall be secured to the LWIC substrate using Factory Mutual and manufacturer approved low-rise foam insulation board adhesive at a field attachment rate not less than 12" on-center 1/4" to 1/2" bead ribbon spacing per 4'x8' board. Perimeter and corner attachment rates must be increased in accordance with Factory Mutual Data Sheets 1-28/29 requirements.
6. Install a layer of fiberglass reinforced 72-mil thermoplastic (PVC) feltback membrane (EnergySmart White). The membrane shall be installed directly over the gypsum cover board and shall be adhered using VOC compliant, water-based adhesive. The membrane shall meet or exceed Cool Roof Rating Council (CRRC) requirements for Title 24 compliance.
7. Install new PVC clad metal drip edge flashing around entire perimeter edge of equipment penthouse. The new drip edge shall have a minimum four inch (4") attachment flange, four-inch (4") vertical face with one-half inch (1/2") hemmed "kick" at bottom edge. The edge metal shall be secured to the new wood nailer using approved galvanized-steel angular ring-shank nails at a spacing of four-inch (4") on-center, staggered. Install a continuous metal cleat (hook strip) and PVC membrane coverstrip in accordance with the Roofing Manufacturer's standard written and detail requirements (see attached Detail Drawing 1.1A). Note: Install PVC clad metal covers at all vertical joints in accordance with Roofing Manufacturer's standard requirements.
8. Replace existing galvanized sheet metal (GSM) gutter and downspout with new 24 gauge "Kynar" coated GSM gutter and downspout. The new gutter shall have a three-inch (3") wide flange for attachment to the new wood nailer using galvanized-steel angular ring-shank nails at a spacing of six-inch (6") on-center. The face dimension of gutter shall be one and a half inches (1-1/2") less the back dimension of gutter. One-inch (1") wide, 16 Ga. GSM spacing straps are to be installed at 36" on-center. The straps are to provide a locking hook strip at face of gutter and shall be attached at the back top edge of gutter using metal capped grommets fasteners set in approved urethane sealant. The strap is to be configured in a "U" shape to provide clearance for the clad metal edge without modification. Gutter end-laps are to be two-inch (2") minimum in direction of flow, sealed with approved urethane sealant and pre-painted pop-riveted to match color of gutter. Rivets are to be installed at two-inch (2") on-center spacing. Note: The new gutters shall be fabricated with a four-inch (4") long vertical down shot sleeve which shall be tight-fitted into the new 4"x4" downspout and internally sealed using Sikaflex 1a, or pre-approved equal one-part urethane sealant. Outside diameter of gutter down shot sleeve shall be 1/16 inch less inside diameter of the new downspout.
9. Install adhered, fiberglass reinforced, 60-mil PVC flashing membrane at vertical parapet walls. Adhere new asphalt/oil resistance PVC flashing membrane to prepared vertical wall substrate with V.O.C. compliant, solvent based flashing adhesive. At existing locations with roof system flashings carried up under existing GSM cap flashing, install new membrane flashing carried up and over the top of wall prior to reinstalling existing GSM cap flashing. At parapet wall locations with existing roof flashings terminated under GSM counter-flashing, adhered membrane flashing shall be carried up to the base of existing GSM counter-flashing receiver and fastened at top edge with manufacturer approved fastener and plate/bar at six (6") inches on-center prior to installing existing GSM counter-flashing skirt. All new sheet metal installation shall conform to current SMACNA, membrane manufacturer and local building code requirements. NOTE: At contractor's option, adhered asphalt/oil resistant

membrane flashing may be substituted with adhered 9 oz. geotextile fabric polypropylene separator and adhered standard 60-mil fiberglass reinforced flashing membrane at vertical flashing locations.

10. At all exhaust fan/vent curb locations install adhered fiberglass reinforced asphalt/oil resistant PVC membrane flashing. Using 60-mil flashing membrane, perform adhered membrane flashing detail (see attached Detail Drawing 5.1). Apply a continuous bead of approved urethane sealant behind flashing membrane at termination point where mechanical fasteners will penetrate membrane. Fastener spacing for membrane termination shall be eight inches (8") on-center using approved fasteners. Reinstall exhaust fan/vent and secure to curb using increased diameter, metal-capped grommets fasteners at a spacing of eight inches (8") on-center. Where possible, use existing fastener holes when installing new fasteners. Seal exposed fastener holes using approved urethane sealant. Note: Where existing flashing height is below eight-inches (8"), install new, dimensional lumber, #2&Btr. grade Douglas Fir curb extensions and secure to existing curb in accordance with local building code seismic requirements. Extend electrical supply (conduit) as required at Power Exhaust Fan units. All electrical work must be performed by a certified/licensed Electrical Contractor only.
11. Install 60-mil asphalt-oil resistant PVC flashing membrane at existing roof hatch curbs. The flashing membrane shall be adhered to the properly prepared vertical substrate using V.O.C. compliant adhesive. Membrane termination shall be performed using Roofing Manufacturer approved termination reglet with one-part urethane sealant (see attached Detail Drawing 5.3).
12. Remove and dispose of all existing 10" X 10" flush mount, low-profile square exhaust vents. At the existing openings, install new, 24-Ga. GSM China Vent and perform PVC membrane flashing as required (see attached Detail Drawing 3.4). Note: The top (cap) of the new China Vent shall extend a minimum of three-inches (3") below the opening at the top of the vent.
13. All open (soil, vent, etc.) pipes will be flashed utilizing "Vent Stack" detail with PVC membrane cap (see attached Detail Drawing 7.1). Note: The use of clamps for membrane termination will not be accepted at open (non-connected) pipes.
14. All connected (conduit, gas, etc.) pipes will be flashed utilizing PVC flashing membrane with 60 mil fiberglass reinforced PVC membrane storm collar (see attached Detail Drawing 7.2A).
15. Replace all existing roof drain clamping ring bolts and debris strainers with new matching components. Broken or missing metal clamping rings to be replaced with new matching clamping rings. Existing drain bowl and reused clamping rings to be thoroughly cleaned, primed and painted prior to reinstalling. All primary and overflow roof drains to receive new asphalt/oil resistant flashing membrane target with one full tube of manufacturer approved urethane sealant between the new flashing membrane and drain bowl receiver flange. Flashing membrane target shall be hot air welded to roof membrane and installed in accordance with "Clamping Ring Drain" flashing detail 6-1.
16. Existing GSM thru wall scupper drains to be replaced with new PVC clad sheet metal scupper flashings. Clean all existing scupper openings of any asphalt contamination. Install new PVC-coated metal scupper inserts in accordance with Membrane Manufacturer and SMACNA requirements. The scupper inserts shall extend through the wall opening and shall be sealed at the outside wall using manufacturer approved urethane sealant.

17. At all inside and outside corner locations, install prefabricated membrane flashings only.
18. At all rooftop electrical conduit, condensate piping, gas piping, etc., install new, prefabricated thermoplastic pipe supports as manufactured by Erico-Caddy, or pre-approved equal. The pipe supports shall be positioned at a maximum spacing as required allowing for continuous four inch (4") clearance above the finished roof surface. Properly secure the conduit/piping to the pipe support using approved metal straps.
19. Install 96-mil PVC walkway tread (Light Grey color) at locations matching existing walkway layout and between concrete equipment support pads and sheet metal splash blocks and roof membrane. The walkway tread shall be installed in accordance with the Roofing Manufacturer's standard written and detail requirements.
20. Perform all roofing work in strict accordance with the herein specified, and/or otherwise indicated City of San Bernardino standards for detail and flashing applications. These standards shall supersede Roofing Manufacturer's minimum/standard requirements.

A. Work Included:

The work includes but is not necessarily limited to the installation of:

1. Substrate Preparation.
2. Wood Nailers/Blocking.
3. Tapered Isocyanurate Roof Insulation Crickets.
4. Fiberglass Matt Faced Gypsum Cover Board.
5. Flashing Membrane Adhesive.
6. Roof Membrane Adhesive
7. Attachment Plates & Fasteners.
8. Thermoplastic (PVC) Roof Membrane.
9. Thermoplastic (PVC) Flashing Membrane.
10. Metal Flashings.
11. Sealants.
12. Roof Drains.
13. Equipment Access/Walkway Tread.
14. Prefabricated Pipe Supports (Erico-Caddy).

1.2 QUALITY ASSURANCE

- A. Pre-Bidding Report: To find and resolve conflicts or lack of definition that may create construction problems, each Bidder for the Work of Section 07543 shall submit a written report to City of San Bernardino Representative at least 15 days before Bids are due for the Work of this Section.
- B. Pre-Roofing Conference and Inspection: After approval of submittals but prior to beginning installation of Work of this Section, the Owner's Representative shall hold a meeting at the site attended by the City of San Bernardino Representative, Roofing Applicator, Sheet Metal, Mechanical, and Electrical Subcontractors, and the Roofing Material Manufacturer to describe in detail the roof system(s) to be installed and to establish agreement, coordination, and responsibilities among the involved trades.

- C. The roofing system shall be applied only by an Applicator authorized by the specified Roofing Manufacturer prior to bid. The Applicator shall have a minimum of five (5) years documented experience with the Roofing Manufacturer. The Owner's Representative reserves the right to request a list of reference projects to verify Applicator's performance/work history. All references must be of similar size and scope, and must be within 100 miles of this project.
- D. The Roofing Manufacturer shall have directly produced the roof membrane for the number of years equal to, or greater than that of the warranty term (20 years). The membrane shall have also maintained a consistent base formulation for the same number of years.
- E. The Roofing Manufacturer shall have a *Sustainable Product Certification* conforming to the requirements of *NSF/ANSI 347 – Sustainability Assessment for Single Ply Roofing Membranes*. Minimum certification level established for this project is: *Platinum*.
- F. Use only a Manufacturer who has initiated a post consumer recycling program and can demonstrate a minimum of five projects where the existing PVC membrane has been removed and recycled into new roofing membrane or PVC components.
- G. Membrane Manufacturer must have *Recycled Content Certification* from UL (Underwriters Laboratories) Environment.
- H. Membrane thickness stated in this document refers to waterproofing membrane PVC polymer thickness. Polyester felt backing is always in addition to the required membrane thickness and is measured in weight per square yard. The required weight for felt backing is nine ounces per square yard (9-Oz./Yd²). This is a non-negotiable minimum requirement.
- I. Unreinforced or polyester reinforced membranes are prohibited.
- J. Re-labeled / re-packaged ("Private-labeled") primary and flashing membranes will not be accepted.
- K. Membrane Manufacturer must have ISO 14001 Certification and a Responsible Care Program in-place with current good standing status.
- L. Membrane Manufacturer must not require the use of membrane cut edge sealant at any location. This is a maintenance item that the Owner does not accept.
- M. The Manufacturer shall provide interim and final roof inspection from a directly employed dedicated team of experienced inspectors. Sales personnel may not be used for onsite inspection of installations.

1.3 PRE-INSTALLATION MEETING

- A. Arrange for a Pre-Installation Meeting between the Applicator, City of San Bernardino Representative, Roofing Manufacturer's Representative, and related trades to be held at least two (2) weeks prior to the beginning of roof system installation.
- B. Review contract documents, manufacturer's instructions, project conditions, and proposed methods and procedures related to installation.

1. Identify conditions that would be detrimental to proper installation.
 2. Review special details, corner conditions, drainage patterns, penetrations and similar conditions of adjacent construction that will affect or impact surface preparation and installation operations.
 3. Review substrates and surfaces to receive materials in order to verify compliance with specified requirements, and with manufacturer's substrate tolerance recommendations and surface preparation requirements, including flatness, levelness, damage and imperfections, and quality of attachment to structure.
 4. Review limitations of floor and roof decks for structural loading both during and after installation.
- C. Review governing regulations and specified requirements for certificates, inspection, reports and closeout submittals.
- D. Review sequence of installation, finalize construction schedule, and verify availability of materials, installer's personnel, equipment and facilities necessary to make progress and avoid delays.
- E. Review temporary protection procedures required to be followed to provide protection of stored and installed products and accessories both during and after installation.
- F. Owner's Representative shall record significant meeting discussions, agreements and disagreements, including required corrective measures and actions to be taken before work begins. Distribute copy of minutes to Owner's Authorized Representative, to each party present, and to parties who should have been present no later than 3 business days following the meeting.
- G. Do not proceed with installation until all attendees, including all parties who should have been present, provide written acknowledgement of receipt and agreement to the conditions and requirements as described in the "Meeting Minutes". If disagreements cannot be successfully resolved, initiate necessary actions to remove impediments to execution of the Work and reconvene meeting at earliest available date to resolve outstanding disagreements.

1.4 PERFORMANCE REQUIREMENTS

General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.

Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.

- C. The applicator shall submit evidence that the proposed roof system meets local building code requirements and has been tested and approved or listed by the following test organizations.
1. Factory Mutual Research Corporation: FM 1-90
 2. Underwriters Laboratories, Inc.: Class A assembly

D. Energy Performance:

Low-Slope Roofs: Provide roof system with an initial Solar Reflectance Index (SRI) of not less than 100 when calculated according to ASTM E 1980 based on testing identical products by a qualified testing agency. Roof membrane (not post installation applied finish) shall comply with current California Title 24 Part 6 minimum 3-year aged solar reflectance of 0.63 and a minimum thermal emittance of 0.75 requirements.

1.5 SUBMITTALS:

A. Submittals (utilizing the base specified system: Sika Sarnafil)

1. A list of each primary component to be used in the roof system and the Manufacturer's current literature for each component.
2. Sample copy of Roofing Manufacturer's warranty.
3. Sample copy of Contractor's warranty.
4. Letter from Roofing Manufacturer confirming that the Contractor is an authorized applicator of the specified roof system.

B. Submittals of equals

Submit proposed equals to be considered for use on this project no less than fifteen (15) days prior to bid date. Proposed roof systems which have been reviewed and accepted will be listed in an addendum prior to bid date; only then will roof systems be accepted at bidding. All below referenced letters must be original, wet-ink signed by the proposed Roofing Manufacturer's Technical Director/Manager. Submittals shall include the following:

1. Two 12 inch x 12 inch membrane samples and two samples of each component to be used in the roofing system.
2. Manufacture's specification matching the herein specified requirements for all sub-sections as listed, including applicable detail drawings and descriptive list of materials to be used.
3. Letter from the proposed Roofing Manufacturer stating that the Manufacturer has a minimum of 20 years consistent experience in directly producing the proposed roof system. The letter shall also state that the proposed Manufacturer's membrane has maintained a consistent formulation for a minimum of 20 years.
4. Letter from the Cool Roof Rating Council (CRRC) stating that the proposed PVC membrane demonstrates the required Solar Reflectance Index requirements as stated in Section 1.4 D above. Submit listing as an approved product by the CRRC.
5. Letter from proposed Roofing Manufacturer describing the specified certified polymer thickness program. Included shall be a sample copy of the proposed Manufacture's certificate for polymer thickness as specified.

6. Letter from the proposed Roofing Manufacturer confirming that it has been engaged in a post-consumer recycling program in compliance with the requirements as started in Section 1.2 F above. The proposed Roofing Manufacturer shall provide written proof that its post-consumer recycling program has achieved *UL Environmental* certification.
7. Complete list of material physical and mechanical properties for each membrane and component including; weights and thicknesses; ultimate elongation; puncture resistance; seam peel strength; breaking strength; tear strength; dimensional stability; low temperature bend; and post-consumer recycle content.
8. Sample copy of specified warranties.
 - a. Manufacturer's 20-Year System Warranty (with no ponding/standing water exclusions).
 - b. Contractor's Two (2) Year Warranty
9. Letter from the proposed Roofing Manufacturer confirming that the Contractor is an authorized applicator of the proposed roof system per the requirements of Section 1.2 C listed above.

1.6 PRODUCT DELIVERY, STORAGE, and HANDLING:

All products delivered to the job-site shall be in the original unopened containers or wrappings bearing all seals and approvals. Handle all materials to prevent damage. Place all materials on pallets and fully protect from moisture.

1.7 JOB CONDITIONS

- A. PVC materials may be installed under certain adverse weather conditions but only after consultation with the Roofing Manufacturer, as installation time and system integrity may be affected.
- B. Uninterrupted waterstops shall be installed at the end of each day's work and shall be completely removed before proceeding with the next day's work.
- C. The Applicator shall conduct adhesion tests in accordance with the latest revision of the SPRI/ANSI Adhesion Test Standard to verify condition of deck and to confirm expected adhesion values. Adhesion tests shall be performed a minimum of one (1) week prior to job start.
- D. Arrange work sequence to avoid use of newly constructed roofing as a walking surface or for equipment movement and storage. Where such access is absolutely required, the Applicator shall provide all necessary protection and barriers to segregate the work area and to prevent damage to adjacent areas. A substantial protection layer consisting of 1/2" plywood over polyester felt or 1/2" plywood over insulation board shall be provided for all new and existing roof areas which receive rooftop traffic during construction.
- E. The Applicator shall verify that all roof drain lines are functioning correctly (not clogged or blocked) before starting work. Applicator shall report any such blockages to the Owner's Representative for corrective action prior to beginning roof system installation.

1.8 BIDDING REQUIREMENTS

A. Bidders Responsibility

Bidders must have held their Roofing Contractors License (C39) for a minimum of five (5) years, with a continuous "Good-Standing" status to qualify to bid on this project. Any discrepancy between measurements and conditions listed within this specification, roof plans, and details, and those actually incurred on the job will be the responsibility of the Applicator.

1.9 WARRANTIES

A. Roofing Manufacturer's 20 Year Full System Warranty: 60 MPH Windspeed Coverage

Upon successful completion of all the work to the Roofing Manufacturer's and Owner's Representative's satisfaction, the 20 Year Full System warranty shall be issued. The System warranty shall provide Non-Penal Sum (replacement cost) coverage for the roof membrane, all associated accessories that comprise the roof system, and all contractor labor. The warranty shall be non-prorated, and shall not exclude ponding/standing water and no time limit shall be assigned for any such ponding/standing water during the warranty term. The warranty shall not exclude regular foot traffic or storage of equipment, materials, tools, etc. of any kind upon the roof membrane surface. Warranty shall not obligate the Owner to perform manufacturer defined maintenance work as a condition of continued warranty coverage.

B. Roofing Applicator/Contractor Two (2) Year Warranty

The Applicator/Contractor shall supply the Owner with a separate two year workmanship warranty. In the event any work related to roofing, flashing, or metal is found to be within the Applicator/Contractor warranty term, defective or otherwise not in accordance with the Contract Documents, the Applicator/Contractor shall repair that defect at no cost to the Owner.

C. "Early Bird" warranties are not to be issued as they will not be accepted by the Owner. The above specified Warranty will be issued only upon acceptance by the Roofing Manufacturer's Technical Department and the Owner's Representative's final approval.

PART 2 - PRODUCTS

2.1 GENERAL

A. The components of the adhered PVC feltback membrane roof system basis of design are products of Sika Sarnafil and/or products utilized by Sika Sarnafil to designate type, quality, and performance standards for this project.

B. Substitutions: Upon pre-approval in accordance with Section 1.5 B above.

2.2 MANUFACTURER AND MEMBRANE

A. Sika Sarnafil: Western Region Contact: (909) 942-0079

- B. G410-72 mil minimum: Fiberglass reinforced membrane with an integral lacquer coating to repel dirt and sustain long-term solar reflectivity.
- C. Membrane shall be manufactured by Extrusion/Spread Coating process only, producing a monolithic membrane with fully encapsulated fiberglass reinforcement layer and a minimum of 35-mils of "weathering" polymer above the fiberglass reinforcement layer.
- D. Membrane shall conform to ASTM D4434 (latest revision), "Standard for Polyvinyl Chloride Sheet Roofing". Classification: Type II Grade I (fiberglass reinforcement).
- E. Roofing Manufacturer shall certify in writing that the product supplied for this project has a minimum polymer thickness of 72 mils. ASTM +/- tolerance for membrane thickness is not accepted.
- F. Membrane shall comply with California Building Code (CBC) Title 24, Section 118 requirements for solar reflectivity and emissivity. Manufacturer and membrane shall be listed in the Cool Roof Rating Council (CRRRC) product listing as outlined by the Department of Energy (DOE) and the Environmental Protection Agency (EPA).
- G. As manufactured, membrane shall conform to the following physical properties:
 1. Color to be "EnergySmart" White.
 2. Thickness to be 72 mil (1.80mm).

Property	<u>TYPICAL PHYSICAL PROPERTIES*</u>		
	ASTM Test Method	ASTM Type II D-4434 Spec. Requirement	Typical Results
Overall Thickness, mil	D751	45	72
Thickness Over Scrim, mil	--	16	35
Reinforcing Material	--	--	Fiberglass
Felt Weight, oz/yd ² (feltback membrane only)	--	--	9
Breaking Strength, lbf/in (N)	D751	55 (245)	100 (445)
Elongation at Break, % M.D.(1) & C.M.D. (1)	D751	250 & 220	250 & 220
Seam Strength, % of original (2)	D751	75	Pass
Retention of Properties After Heat Aging	D3045	--	--
Breaking Strength, % of original	D751	90	Pass
Elongation, % of original	D751	90	Pass
Tearing Resistance, lbf (N)	D1004	10 (45)	20.5 (91)
Low Temperature Bend, -40F(-40C)	D2136	Pass	Pass
Accelerated Weather Test (Florescent Light UV Exposure),Hours	G154	5,000	10,000
Cracking (7x magnification)		None	None
Discoloration (by observation)		Negligible	Negligible
Crazing (7x magnification)		None	None
Linear Dimensional Change, %	D1204	0.1	-0.01

Weight Change After Immersion in Water, %	D570	+/- 3.0	1.8
Static Puncture Resistance, lbf (kg)	D5602	33 (15)	Pass
Dynamic Puncture Resistance, ft-lbf (J)	D5635	7.3 (10)	Pass

Recycle Content 9% Pre-consume, 1% Post-consumer

*Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions, and curing conditions.

(1) M.D. = Machine Direction, C.M.D. = Cross Machine Direction

(2) Failure occurs through membrane rupture not seam failure.

2.3 FLASHING MATERIALS

A. Wall/Curb Flashing

1. G410 Membrane: Fiberglass reinforced membrane adhered to approved substrate using Stabond adhesive. Consult Sarnafil Product Data Sheets for additional information.
2. G459 Membrane: Fiberglass reinforced asphalt/oil resistant membrane adhered to approved substrate using Stabond adhesive. Consult Sarnafil Product Data Sheets for additional information.
3. Sarnaclad: PVC-coated, heat-weldable sheet metal. Sarnaclad is a 24 gauge, G90 galvanized metal sheet with a 20 mil (1 mm) unsupported PVC membrane laminated on one side. Consult Sarnafil Product Data Sheet for additional information.

B. Perimeter Flashing:

1. High Wind PVC Clad Metal Edge (Project Detail 1-1A): PVC coated, heat-weldable sheet metal with continuous 20-gauge galvanized metal cleat. Sarnaclad is a 24 gauge, G90 galvanized metal sheet with a 20 mil (1 mm) unsupported PVC membrane laminated on one side.

C. Miscellaneous Flashing;

1. Aluminum Membrane Attachment Bar (Sarnastop)
2. Termination Reglet (Sarnareglet)
3. Pipe Boots (Sarnastack)
4. Universal Corners (Sarnacorners)
5. Flashing Membrane Adhesive (Stabond)

2.4 COVER BOARD / ISOCYANURATE INSULATION

- A. Georgia-Pacific DensDeck® Cover Board: Impact and mold resistant, gypsum core fire barrier board with pre-coated glass-mat facers. Manufactured to meet the following requirements:
1. ASTM C 1177 (Consensus Standard).
 2. Smoke Developed (ASTM E-84): 0 (Zero).
 3. Flame Spread (ASTM E-84): 0 (Zero).
 4. Mold Resistance (ASTM D3273): 10 (highest level of performance for mold resistance).
 5. Compressive Strength (ASTM C 473): 900 psi, nominal.
 6. Weight (nominal): 1.2 Lbs./Ft².
 7. Board Size: 1/4" X 4' X 8'.
- B. Tapered Insulation (Crickets Only): 1/2" min. x 4' x 4' sloped rigid roof insulation panels composed of polyisocyanurate closed-cell foam core with black mat facer laminated to both sides. Manufactured to meet the following requirements:
1. ASTM C1289-11, Type II, Class 1, Grade 2 (20 psi)
 2. Zero Ozone Depletion Potential (ODP) from blowing agent (HCFC-free).
 3. Long-Term Thermal Resistance (LTTR) R-Value based on ASTM 1303-11 and/or CAN/ULC-S770-09: Regardless of published values.
 4. Facer Type: Black mat, fiber reinforced.
 5. Board Size: 1/2" min. x 4' x 4'.
 6. Tapered Insulation Slope: 1/2" per foot (double the primary slope) or as indicated otherwise.

2.5 ATTACHMENT COMPONENTS

- A. Membrane Adhesive: V.O.C. Compliant Water Based Adhesive (Sarnacol 2121 Adhesive): Water-based adhesive used to attach the membrane to the horizontal or near-horizontal substrate. Consult Product Data Sheets for additional information.
- B. Cover Board / Insulation Adhesive (Sarnacol 2163 Adhesive): A low odor, VOC compliant, one step, low-rise urethane foam used to attach insulation to approved compatible substrates. Adhesive is applied with a gravity fed applicator or by hand with a dual component caulk gun. Consult Product Data Sheets for additional information.
- C. Flashing Membrane Adhesive (Stabond Adhesive): Solvent-based reactivating-type adhesive used to attach the membrane to the flashing substrate. Consult Product Data Sheets for additional information.
- D. Sarnafastener-XP: Corrosion-resistant #15 fastener used with attachment bar to attach roof membrane at base of vertical flashings to approved substrate.
- E. Membrane Attachment Bar (Sarnastop): One (1) inch wide, pre-punched aluminum membrane attachment bar. Used to attach PVC membrane at all perimeter and base-angle transitions. Consult Sarnafil Product Data Sheet for additional information.

2.6 WALKWAY PROTECTION

- A. Equipment Access/Walkway Tread (Sarnatred): Polyester reinforced, 96 mil/2.4 mm), weldable membrane with surface embossment. Used as a protection layer from rooftop traffic. Sarnatred is supplied in rolls of 39.3 inches wide and 50.0 feet long. Consult Sarnafil Product Data Sheet for additional information.

2.7 MISCELLANEOUS ACCESSORIES

- A. Multi-Purpose Sealing Tape: Compressible foam with pressure-sensitive adhesive on one side. Used with metal flashings as a preventive measure against air and windblown moisture entry.
- B. Sarnasolv: Solvent cleaner used for the general cleaning of scuff marks, etc., from the Membrane surface.

2.8 SEALANTS

- A. Depending on substrates, the following sealants are options for temporary overnight tie-ins:
 - 1. Multiple layers of roofing cement and felt.
 - 2. Mechanical attachment with rigid bars and compressed sealant.

2.9 MISCELLANEOUS FASTENERS AND ANCHORS:

- A. All fasteners, anchors, nails, straps, bars, etc. shall be post-galvanized steel, aluminum or stainless steel.

PART 3 - EXECUTION

3.1 EXAMINATION:

Report to Owner in writing, all conditions that interfere with or prevent correct installation of work of this Section.

3.2 PRE-INSTALLATION MEETING

- A. Refer to Section 1.3 of this specification for meeting agenda requirements.

Discuss the following additional project aspects:

- 1. Safety
- 2. Set up
- 3. Construction schedule
- 4. Contract conditions
- 5. Coordination of the work
- 6. Building access and material staging
- 7. Structural Loading Limitations/Requirements
- 8. Review of Deck and/or Substrate Conditions

3.3 SUBSTRATE CONDITION

- A. Applicator shall be responsible for acceptance or provision of proper substrate to receive new roofing materials.
- B. Applicator shall verify that the work done under related sections meets the following conditions:
 - 1. Roof drains and/or scuppers have been installed properly.
 - 2. Roof curbs, equipment supports, vents and other roof penetrations are properly secured and prepared to receive new roofing materials.
 - 3. All surfaces are smooth and free of dirt, debris and incompatible materials.
 - 4. All roof surfaces shall be free of water.

3.4 SUBSTRATE PREPARATION

The roof deck and existing roof construction must be structurally sound to provide support for the new roof system. The Applicator shall load materials on the rooftop in such a manner to eliminate risk of deck overload due to concentrated weight. The District's Representative shall ensure that the roof deck is secured to the structural framing according to local building code and in such a manner as to resist all anticipated wind loads in that location.

3.5 SUBSTRATE INSPECTION

- A. A dry, clean and smooth substrate shall be prepared to receive the new PVC feltback membrane roof system.
- B. The Applicator shall inspect the substrate for defects such as excessive surface roughness, contamination, structural inadequacy, or any other condition that will adversely affect the quality of work.
- C. The substrate shall be clean, smooth, dry, free of flaws, sharp edges, loose and foreign material, oil and grease. Roofing shall not start until all defects have been corrected.
- D. All roof surfaces shall be free of water.
- E. PVC membrane shall be applied over compatible and accepted substrates only.

3.6 COVER BOARD / INSULATION INSTALLATION

- A. Tapered insulation and cover board shall be adhered to the LWIC deck substrate with approved low-rise foam board adhesive at a rate according to Factory Mutual Class 1-90 and the Roofing Manufacturer's requirements for fastening rates and patterns.

3.7 INSTALLATION OF PVC FELTBACK ROOF MEMBRANE:

- A. General
 - 1. Roof membrane is to be adhered according to the Roofing Manufacturer and Factory Mutual's requirements.

2. Membrane overlaps shall be shingled with the flow of water where possible.
3. Tack welding of membrane full or half-width rolls for purposes of temporary restraint during installation on windy days is not permitted. Consult Roofing Manufacturer's Technical Department for further information.
4. Hot-air weld overlaps according to roofing manufacturer's Take test cuts at least 3 times per day.
5. Membrane flashings shall extend 2-1/2 inches past the membrane attachment bar and shall be hot-air welded to the field membrane as required.

3.8 HOT-AIR WELDING OF SEAM OVERLAPS :

- A. All field seams shall be hot-air welded using robotic welding equipment only (no hand-held welders). Seam overlaps should be 3 inches wide except for certain details.

3.9 MEMBRANE FLASHINGS:

- A. All flashings shall be installed concurrently with the roof membrane as the job progresses.
- B. Stabond Adhesive for Membrane Flashings: Stabond adhesive shall be applied according to instruction found on the Product Data Sheets. The bonded sheet shall be pressed firmly in place with a hand roller.
- C. All flashings shall extend a minimum of eight (8) inches above roofing level unless otherwise accepted in writing. No bitumen shall be in contact with standard PVC flashing membrane. When asphalt contamination is present, use only asphalt/oil resistant flashing membrane. All flashing membranes shall be mechanically fastened along the counter-flashed top edge with Sarnastop at six inches (6") on-center.

3.10 PVC CLAD METAL DRIP FLASHINGS:

- A. All metal flashings shall be fastened into metal stud or wood nailers. Fasteners shall penetrate the nailer a minimum of 1 inch. Metal shall be installed to provide adequate resistance to bending and allow for normal thermal expansion and contraction.
- B. Adjacent sheets of PVC clad metal shall be spaced 1/4 inch apart. The joint shall be covered with two (2) inch wide aluminum tape. A four (4) inch minimum wide strip of PVC flashing membrane shall be hot-air welded over the joint.

3.11 METAL FLASHINGS

- A. Metal details, fabrication practices and installation methods shall conform to the applicable requirements of the following:
 1. Factory Mutual Loss Prevention Data Sheet 1-49 (latest issue).
 2. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) – latest issue.

- B. Metal joints shall be watertight. Metal flashings shall be securely fastened into metal stud backing plates or wood substrate. Fasteners shall penetrate the metal studs or wood substrate. Counter flashings shall overlap base flashings at least four (4) inches. Hook strips shall extend past metal studs and shall be securely sealed from air entry.

3.12 WALKWAY INSTALLATION

- A. Sarnatred Walkway: Apply a continuous coat of Stabond adhesive to the deck sheet and the back of Walkway in accordance with Sika Sarnafil's Technical requirements and press Walkway into place with a water-filled, foam-covered roller. Hot-air weld the entire perimeter of the Walkway to the field membrane.

3.13 TEMPORARY CUT-OFF

- A. Flashings shall be installed concurrently with the roof membrane in order to maintain a watertight condition as the work progresses:
 - 1. Temporary waterstops shall be constructed to provide a 100% watertight seal.
 - 2. Stagger of the insulation or cover board joints shall be made even by installing partial panels.
 - 3. New membrane shall be carried into the waterstop sealant.
 - 4. Waterstop shall be sealed to the deck and/or substrate so that water will not be allowed to travel under the new or existing roofing.
 - 5. When work resumes, the contaminated membrane shall be cut out.
 - 6. Sealant, contaminated membrane, insulation fillers, etc. shall be removed from work area and properly disposed of offsite. These materials shall not be used in new work.
- B. If inclement weather occurs while temporary waterstop is in place, Applicator shall provide the labor necessary to monitor the situation to maintain a watertight condition.
- C. If water is allowed to enter under the newly-completed roofing, the affected area shall be removed and replaced at the Applicator's expense.

3.14 FIELD QUALITY CONTROL

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion and submit report to Owner's Representative.
- B. Repair or remove and replace components of membrane roofing system where test results or inspections indicate that they do not comply with specified requirements.

3.15 PROTECTION AND CLEANING

- A. Protect membrane roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, provide written report, with copies to the Owner's Representative.

- B. Correct deficiencies in or remove membrane roofing system that does not comply with requirements, repair substrates, and repair or reinstall membrane roofing system to a condition free of damage and deterioration at time of Contract Completion and according to warranty requirements.

3.16 DEMONSTRATION

- A. Provide maintenance documents and personnel instruction for the facilities staff and other interested parties at a single pre-determined mutually convenient time. The instruction shall include the following topics:
 - 1. Access restriction and precautions.
 - 2. Avoiding mechanical damage.
 - 3. Potential contaminants and rectification.
 - 4. Cleaning.
 - 5. Emergency repairs.
 - 6. Procedures for permanent repairs and alterations.

END OF SECTION

2-3/4" INSULATED TRANSLUCENT FIBERGLASS SANDWICH PANEL SKYLIGHT SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes the insulated translucent sandwich panel skylight system and accessories as shown and specified. Work includes providing and installing:**
 - 1. 2 3/4" factory prefabricated structural insulated translucent sandwich panels**
 - 2. Aluminum installation system**
 - 3. Aluminum flashing attached to skylights**

1.2 SUBMITTALS

- A. Submit manufacturer's product data. Include construction details, material descriptions, profiles and finishes of skylight components.**
- B. Submit shop drawings. Include elevations and details.**
- C. Submit manufacturer's color charts showing the full range of colors available for factory-finished aluminum.**
 - 1. When requested, submit samples for each exposed finish required, in same thickness and material indicated for the work and in size indicated below. If finishes involve normal color variations, include sample sets consisting of two or more units showing the full range of variations expected.**
 - a. Sandwich panels: 14" x 28" units**
 - b. Factory finished aluminum: 5" long sections**
- D. Submit Installer Certificate, signed by installer, certifying compliance with project qualification requirements.**
- E. Submit product reports from a qualified independent testing agency indicating each type and class of panel system complies with the project performance requirements, based on comprehensive testing of current products. Previously completed reports will be acceptable if for current manufacturer and indicative of products used on this project.**
 - 1. Reports required are:**
 - a. International Building Code Evaluation Report**
 - b. Flame Spread and Smoke Developed (UL 723) – Submit UL Card**
 - c. Burn Extent (ASTM D 635)**
 - d. Color Difference (ASTM D 2244)**
 - e. Impact Strength (UL 972)**
 - f. Bond Tensile Strength (ASTM C 297 after aging by ASTM D 1037)**
 - g. Bond Shear Strength (ASTM D 1002)**

- h. Beam Bending Strength (ASTM E 72)
- i. Fall Through Resistance (ASTM E 661)
- j. Insulation U-Factor (NFRC 100)
- k. NFRC System U-Factor Certification (NFRC 700)
- l. Solar Heat Gain Coefficient (NFRC or Calculations)
- m. Condensation Resistance Factor (AAMA 1503)
- n. Air Leakage (ASTM E 283)
- o. Structural Performance (ASTM E 330)
- p. Water Penetration (ASTM E 331)
- q. Class A Roof Covering Burning Brand (ASTM E 108)

1.3 QUALITY ASSURANCE

A. Manufacturer's Qualifications

1. Material and products shall be manufactured by a company continuously and regularly employed in the manufacture of specified materials for a period of at least ten consecutive years and which can show evidence of those materials being satisfactorily used on at least six projects of similar size, scope and location. At least three of the projects shall have been in successful use for ten years or longer.
2. Panel system must be listed by an ANSI accredited Evaluation Service, which requires quality control inspections and fire, structural and water infiltration testing of sandwich panel systems by an accredited agency.
3. Quality control inspections shall be conducted at least once each year and shall include manufacturing facilities, sandwich panel components and production sandwich panels for conformance with AC177 "Translucent Fiberglass Reinforced Plastic (FRP) Faced Panel Wall, Roof and Skylight Systems" as issued by the ICC-ES.

- B. Installer's Qualifications: Installation shall be by an experienced installer, which has been in the business of installing specified skylight systems for at least two consecutive years and can show evidence of satisfactory completion of projects of similar size, scope and type.

1.4 PERFORMANCE REQUIREMENTS

- A. The manufacturer shall be responsible for the configuration and fabrication of the complete skylight panel system.

1. When requested, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
2. Standard skylight system shall have less than 0.01 cfm/ft² air leakage by ASTM E 283 at 6.24 PSF (50 mph) and no water penetration by ASTM E 331 at 15 PSF; and structural testing by ASTM E 330.
3. Structural Loads; Provide skylight system capable of handling the following loads:
 - a. Live Load: 20 PSF
 - b. Snow Load: 0 PSF; Drift Load: 0 PSF
 - c. Wind Load: 20 PSF

1.5 DELIVERY STORAGE AND HANDLING

- A. Deliver panel system, components and materials in manufacturer's standard protective packaging.
- B. Store panels on the long edge; several inches above the ground, blocked and under cover in accordance with manufacturer's storage and handling instructions.

1.6 WARRANTY

- A. Submit manufacturer's and installer's written warranty agreeing to repair or replace panel system work, which fails in materials or workmanship within one year of the date of delivery. Failure of materials or workmanship shall include leakage, excessive deflection, deterioration of finish on metal in excess of normal weathering, defects in accessories, insulated translucent sandwich panels and other components of the work.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. The basis for this specification is for products manufactured by Kalwall Corporation. Other fiberglass sandwich panel manufacturers may bid this project provided they comply with all of the performance requirements of this specification and submit evidence thereof. Listing other manufacturers' names in this specification does not constitute approval of their products or relieve them of compliance with all the performance requirements contained herein. Approval of alternate manufacturer will be by addendum only (10) days prior to bid date. Contact: Kalwall Local Representative: Jennifer Hauck, Integrated Marketing Concepts, Inc. 909.392.5500
- B. Structures Unlimited, Inc.
- C. Solar Components Corporation

2.2 PANEL COMPONENTS

A. Face Sheets

1. Translucent faces: Manufactured from glass fiber reinforced thermoset resins, formulated specifically for architectural use.
 - a. Thermoplastic (e.g. polycarbonate, acrylic) faces are not acceptable.
 - b. Face sheets shall not deform, deflect or drip when subjected to fire or flame.
2. Interior face sheets:
 - a. Flame spread: Underwriters Laboratories (UL) listed, which requires periodic unannounced retesting, with flame spread rating no greater than 20 and smoke developed no greater than 200 when tested in accordance with UL 723.
 - b. Burn extent by ASTM D 635 shall be no greater than 1".
3. Exterior face sheets:
 - a. Color stability: Full thickness of the exterior face sheet shall not change color more than 3 CIE Units DELTA E by ASTM D 2244 after 5 years outdoor South Florida weathering at 5° facing south, determined by the average of at least three white samples with and without a protective film or coating to ensure long-term color stability. Color stability shall be unaffected by abrasion or scratching.
 - b. Strength: Exterior face sheet shall be uniform in strength, impenetrable by hand held pencil and repel an impact minimum of 70 ft. lbs. without fracture or tear when impacted by a 3-1/4" diameter, 5 lb. free-falling ball per UL 972.
4. Appearance:

- a. Exterior face sheets: Smooth, .070 thick super-weathering and crystal in color.
- b. Interior face sheets: Smooth, .045 thick type 25 and white in color.
- c. Face sheets shall not vary more than $\pm 10\%$ in thickness and be uniform in color.

B. Grid Core

1. Aluminum I-beam grid core shall be of 6063-T6 or 6005-T5 alloy and temper with provisions for mechanical interlocking of muntin-mullion and perimeter. Width of I-beam shall be no less than 7/16".
2. I-beam Thermal break: Minimum 1", thermoset fiberglass composite.

C. Laminate Adhesive

1. Heat and pressure resin type adhesive engineered for structural sandwich panel use, with minimum 25-years field use. Adhesive shall pass testing requirements specified by the International Code Council "Acceptance Criteria for Sandwich Panel Adhesives".
2. Minimum tensile strength of 750 PSI when the panel assembly is tested by ASTM C 297 after two exposures to six cycles each of the aging conditions prescribed by ASTM D 1037.
3. Minimum shear strength of the panel adhesive by ASTM D 1002 after exposure to four separate conditions:
 - a. 50% Relative Humidity at 68° F: 540 PSI
 - b. 182° F: 100 PSI
 - c. Accelerated Aging by ASTM D 1037 at room temperature: 800 PSI
 - d. Accelerated Aging by ASTM D 1037 at 182° F: 250 PSI

2.3 PANEL CONSTRUCTION

- A. Provide sandwich panels of flat fiberglass reinforced translucent face sheets laminated to a grid core of mechanically interlocking I-beams. The adhesive bonding line shall be straight, cover the entire width of the I-beam and have a neat, sharp edge.
 1. Thickness: 2-3/4"
 2. Light transmission: 20%
 3. Solar heat gain coefficient .26
 4. Panel U-factor by NFRC certified laboratory: 2-3/4" aluminum grid .29
 5. Complete insulated panel system shall have NFRC certified U-factor of .44
 6. Grid pattern: Nominal size 8"x20"; pattern shoji.
- B. Standard panels shall deflect no more than 1.9" at 30 PSF in 10' 0" span without a supporting frame by ASTM E 72.
- C. Standard panels shall withstand 1200° F fire for minimum one hour without collapse or exterior flaming.
- D. Thermally broken panels: Minimum Condensation Resistance Factor of 80 by AAMA 1503 measured on the bond line.
- E. Skylight System:
 1. Skylight system shall pass Class A Roof Burning Brand Test By ASTM E 108.
- F. Skylight System shall meet the fall through requirements of OSHA 1910.23 as demonstrated by testing in accordance with ASTM E661, thereby not requiring supplemental screens or railings.

2.4 BATTENS AND PERIMETER CLOSURE SYSTEM

A. Closure system:

1. Extruded aluminum 6063-T6 and 6063-T5 alloy and temper clamp-tite screw type closure system.
2. Curved closure system may be roll formed.
3. Skylight perimeter closures at curbs shall be factory sealed to panels.

B. Sealing tape: Manufacturer's standard, pre-applied to closure system at the factory under controlled conditions.

C. Fasteners: 300 series stainless steel screws for aluminum closures, excluding final fasteners to the building.

D. Finish:

1. Manufacturer's factory applied finish, which meets the performance requirements of AAMA 2604. Color to be Kalwall KCRF (selected from manufacturer's standards).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Installer shall examine substrates, supporting structure and installation conditions.
- B. Do not proceed with panel installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Metal Protection:

1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose.
2. Where aluminum will contact concrete, masonry or pressure treated wood, protect against corrosion by painting contact surfaces with bituminous paint or method recommended by manufacturer.

3.3 INSTALLATION

- A. Install the skylight system in accordance with the manufacturer's suggested installation recommendations and approved shop drawings.
 1. Anchor component parts securely in place by permanent mechanical attachment system.
 2. Accommodate thermal and mechanical movements.
 3. Set perimeter framing in a full bed of sealant compound, or with joint fillers or gaskets to provide weather-tight construction.
- B. Install joint sealants at perimeter joints and within the panel system in accordance with manufacturer's installation instructions.

3.4 FIELD QUALITY CONTROL

- A. Water Test: Installer to test skylights according to procedures in AAMA 501.2.
- B. Repair or replace work that does not pass testing or that is damaged by testing and retest work.

3.5 CLEANING

- A. Clean the skylight system interior and exterior, immediately after installation.**
- B. Refer to manufacturer's written recommendations.**

END OF SECTION 08 45 23

SECTION 9

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SECTION 10

10-1 MOBILIZATION

10-1.01 GENERAL -- Mobilization shall comply with the requirements of Section 9-3.4, "Mobilization", of the Standard Specifications.

Mobilization may include, but not be limited to, the following principle items:

1. Submittal and modification, as required, of the Construction Schedule.
2. Review of the Site.
3. Obtaining all required Transportation Permits.
4. Submittal of all required insurance certificates and bonds as required by these Special Provisions.
5. Moving onto the site (as required), including, but not limited to:
 - a. Equipment
 - b. Arranging for and erection of Contractor's work and storage areas.
6. Installing construction fencing and temporary construction power and wiring.
7. Providing a minimum of one restroom facility for each twenty-five (25) workers occupying the site. Facilities may include existing functioning restrooms, or portable chemical facilities, or any combination thereof, and shall count as one for each urinal or one for each water closet (as required).
8. Installing all temporary utilities (as required).
9. Posting all OSHA required notices and establishment of safety programs.
10. Posting of all Department of Labor notices.
11. Having the Contractor's superintendent at the job site full-time and responding 24 hours per day.
12. Air and water quality protective measures, as necessary, and without limitation.

13. Demobilization of the Site.

14. Any other item as specified.

10-1.02 PAYMENT – The contract lump sum price paid for "**MOBILIZATION**" shall be deemed to include the cost of work in advance of construction operation and not directly attributable to any specific bid item, and no additional compensation will be allowed therefor.

SECTION 11 THROUGH SECTION 49

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SECTION 50

50-1 REMOVAL AND RESTORATION OF EXISTING IMPROVEMENTS EXCEPT STREET PAVEMENT

50-1.01 GENERAL - The Contractor shall comply with Section 7-9, "Protection and Restoration of Existing Improvements", of the Standard Specifications, latest edition, and these Special Provisions.

All existing improvements (except utilities and street pavements) including, but not limited to curbs, gutters, cross gutters, spandrels, driveways and sidewalks, walls, fences, sprinkler systems, lawns, shrubs, trees, and traffic signs, traffic striping and traffic detector loops which are damaged or removed during the course of construction of the project shall be restored or replaced to a condition equal to or better than, in all respects, the existing improvements removed or damaged, unless otherwise specified or noted on the drawings.

The removal and restoration of existing improvements shall be in accordance with the applicable provision of these Special Provisions, the Standard Specifications, Standard Drawing and the following requirements:

1. In the event a portion of curb, gutter or monolithic curb and gutter is damaged by the Contractor's operations, a minimum of 10 feet of curb, gutter or curb and gutter shall be removed and replaced regardless of how short a length is damaged. The Contractor shall begin said 10-foot section, if possible, at an existing joint or scoring line. If said 10-foot section ends within 3 feet of an existing joint or scoring line, then the removal shall extend to said joint or scoring line.
2. If concrete cross gutter is damaged by the Contractor's operations, the cross gutter shall be removed in its entirety and replaced.
3. Concrete sidewalk shall be removed in its entirety between scoring lines or between scoring line and joint. Prior to removal, scoring lines shall be saw-cut.
4. If a concrete driveway is damaged and is a single monolithic structure, it shall be removed in its entirety and replaced.
5. If a concrete driveway is damaged and is monolithic with the sidewalk, it shall be set off from the sidewalk by a saw cut along the edge of the sidewalk. The driveway shall then be removed in its entirety and replaced.

6. If the roadside signs are damaged during the construction, they shall be restored or replaced to a condition equal or better than the existing per the prior approval of the City's Traffic Section. New installation shall not impede into required ADA access distance around obstacles. A minimum clearance of 48" shall be maintained.
7. If existing fence is in conflict with the new construction, fence shall be relocated by the Contractor.

Unless otherwise specified, all excess excavation or removed material shall become the property of the Contractor and shall be disposed of by him away from the site of work.

50-1.02 PAYMENT - Full compensation for conforming to the requirements of this section, not otherwise provided for, shall be considered as included in the prices paid for the various contract bid items of work involved, and no additional compensation will be allowed therefor.

SECTION 51 THROUGH SECTION 55

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SECTION 56

ROOFING

11-1.01 **GENERAL** -- Roofing shall comply with the requirements of Chapter XX, "Site Work, Roofing and Construction", of the CBC , XXXX Edition.

11-1.02 **PAYMENT** -- Roofing shall include all costs for removing existing fixtures, as specified on plans, including proper disposal of said materials. The contract lump sum price paid for "**ROOFING**" shall be deemed to include the costs for all labor, tools, equipment, materials and appurtenant required to complete the work as specified, and as required by the Engineer, and no additional time or compensation will b allowed therefor.

SECTION 57 THROUGH SECTION 62

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SECTION 63

11-1 DEMOLITION

11-1.01 GENERAL -- Demolition shall comply with the requirements of Chapter 33, "Site Work, Demolition and Construction", of the CBC , 1998 Edition.

11-1.02 PAYMENT -- Demolition shall include all costs for removing existing fixtures, as specified on plans, including proper disposal of said materials. The contract lump sum price paid for "**DEMOLITION**" shall be deemed to include the costs for all labor, tools, equipment, materials and appurtenant required to complete the work as specified, and as required by the Engineer, and no additional time or compensation will b allowed therefor.

PART III

SPECIAL PROVISIONS

The Prime Contractor of a Federal-Aid project shall **physically** include the required contract provisions contained in the following Federal Provisions and Conditions in all subcontracts, lower tier subcontracts and purchase orders.

Federal Labor Standards Provisions

U.S. Department of Housing and Urban Development Office of Labor Relations

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract in the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(i), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (I) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration . . . makes, utters or publishes any statement knowing the same to be false . . . shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 98). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

**SUPPLEMENTARY CONDITIONS
OF THE CONTRACT FOR
CONSTRUCTION**

U.S. Department of Housing
and Urban Development
Office of Housing

OMB Approval No. 2502-0598
(Exp. 04/30/2014)

Public Reporting Burden for this collection of information is estimated to average 0.2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Response to this request for information is required in order to receive the benefits to be derived. This agency may not collect this information, and you are not required to complete this form unless it displays a currently valid OMB control number. While no assurance of confidentiality is pledged to respondents, HUD generally discloses this data only in response to a Freedom of Information Act request.

Article 1: Labor Standards

A. Applicability. The Project or program to which the construction work covered by this Contract pertains is being assisted or insured by the United States of America, and the following Federal Labor Standards Provisions are included in this Contract or related instrument pursuant to the provisions applicable to such Federal assistance or insurance. Any statute or regulation contained herein shall also include any subsequent amendment or successor statute or regulation.

B. Minimum Wages. Pursuant to Section 212 of the National Housing Act, as amended, 12 U.S.C. 1715c, the minimum wage provisions contained in this paragraph B do not apply to those projects with Security Instruments insured under Section 221(h)(1) designed for less than 9 families and they do not apply to those projects with Security Instruments insured under either Section 220 or 233 designed for less than 12 families.

1. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the Project) shall be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1 (b)(2) of the Davis-Bacon Act (40 U.S.C. 3141(2)(B)(ii)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each

classification for the time actually worked therein: *Provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii)) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics that is not listed in the wage determination and that is to be employed under this Contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, D.C. 20210 ("Administrator"). The Administrator, or an authorized representative, shall approve, modify, or disapprove every additional classification action within thirty (30) days of receipt and so advise HUD or its designee or shall notify HUD or its designee within the thirty (30) day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, shall issue a determination within thirty (30) days of receipt and so advise HUD or its designee or shall notify HUD or its designee within the thirty (30) day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs B.1.(ii)(b) or (c) of this Article, shall be paid to all workers

performing work in the classification under this Contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit that is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the Project), all or part of the wages required by the Contract, HUD or its designee may, after written notice to the Contractor, sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due.

3. Payrolls, records, and certifications.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the Project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1 (b)(2)(B) of the Davis-Bacon Act (40 U.S.C. 3141(2)(B)(ii))), daily and weekly number of hours worked, deductions made and actual wages paid.

Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1 (b)(2)(B) of the Davis-Bacon Act (40 U.S.C. 3141(2)(B)(ii)), the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii)(a) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the Contract, but if the agency is not such a party, the Contractor shall submit the payrolls to the applicant, sponsor, or Owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347.pdf> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the Contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant sponsor, or Owner, as the case may be, for transmission to HUD or its designee, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete.

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph B.3.(ii)(b) of this Article.

(d) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Sections 3801 et seq of Title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under subparagraph B.3.(i) of this Article available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the Contractor, sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices shall be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by such Office, or if a person is employed in his or her first ninety (90) days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship, or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in

any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where the Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship, or a State Apprenticeship Agency recognized by such Office, withdraws approval of an apprenticeship program, the Contractor shall no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees shall not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman's hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws

approval of a training program, the Contractor shall no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements. The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this Contract.

6. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraphs 1 through 10 of this paragraph B and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage determination, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all Contract clauses referenced in this subparagraph.

7. Contract termination and debarment. A breach of the Contract clauses in 29 CFR 5.5 may be grounds for termination of the Contract, and for debarment as a contractor or a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this Contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this Contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act (40 U.S.C. 3144(b)(2)) or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act (40

U.S.C. 3144(b)(2)) or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Department . . . makes, passes, utters or publishes any statement, knowing the same to be false . . . shall be fined under this title or imprisoned not more than two years, or both."

C. Contract Work Hours and Safety Standards Act.

1. Applicability and Definitions. This paragraph C of Article 1 is applicable only if a direct form of federal assistance is involved, such as Section 8, Section 202/811 Capital Advance, grants etc., and is applicable only where the prime contract is in an amount greater than \$100,000. As used in this paragraph C, the terms "laborers" and "mechanics" include watchmen and guards.

2. Overtime requirements. No contractor or subcontractor contracting for any part of the Contract work that may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty (40) hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek.

3. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the immediately preceding subparagraph C.2, the Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, the Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of such subparagraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty (40) hours without payment of the overtime wages required by the clause set forth in such subparagraph.

4. Withholding for unpaid wages and liquidated damages. HUD or its designee shall, upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract, or under any other Federal contract with the same prime contractor, or under any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or

subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph 3 of this paragraph C.

5. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraphs 1 through 5 of this paragraph C and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in such subparagraphs 1 through 5.

D. Certification.

For projects with Security Instruments insured under the National Housing Act, as amended, that are subject to paragraph B of this Article 1, the Contractor is required to execute the Contractor's Prevailing Wage Certificate within HUD-92448 as a condition precedent to insurance by HUD of the Loan, or an advance thereof, made or to be made by the Lender in connection with the construction of the Project.

Article 2: Equal Employment Opportunity

A. Applicability. This Article 2 applies to any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee.

B. The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, disability, or national origin. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, disability or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided setting forth the provisions of this nondiscrimination clause.

C. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified applicants shall receive consideration for employment without regard to race, color, religion, sex, disability, or national origin.

D. The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided advising the said labor union or workers representatives of the Contractor's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

E. The Contractor shall comply with all provisions of Executive Order 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.

F. The Contractor shall furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and shall permit access to its books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

G. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and Contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulations or order of the Secretary of Labor, or as otherwise provided by law.

H. The Contractor shall include the provisions of paragraphs A through H of this Article 2 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions shall be binding upon each subcontractor or vendor. The Contractor shall take such action with respect to any subcontract or purchase order as HUD or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. *Provided, however,* that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by HUD or the Secretary of Labor, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Article 3: Equal Opportunity for Businesses and Lower Income Persons Located Within the Project Area

A. This Article 3 is applicable to projects covered by Section 3, as defined in 24 CFR Part 135.

B. The work to be performed under this Contract is on a project assisted under a program providing direct Federal financial assistance from HUD and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given to lower income residents of the unit of local government or the metropolitan area (or non-metropolitan county) as determined by HUD in which the Project is located and contracts for work in connection with the Project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the same metropolitan area (or non-metropolitan county) as the Project.

Article 4: Health and Safety

A. This Article 4 is applicable only where the prime contract is in an amount greater than \$100,000.

B. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his or her health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

C. The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to 29 CFR Part 1926, and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, 40 USC 3701 et seq.

D. The Contractor shall include the provisions of this Article 4 in every subcontract so that such provisions shall be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as HUD or the Secretary of Labor shall direct as a means of enforcing such provisions.

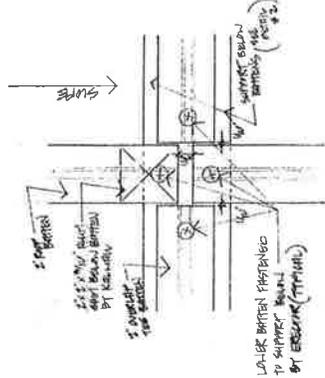
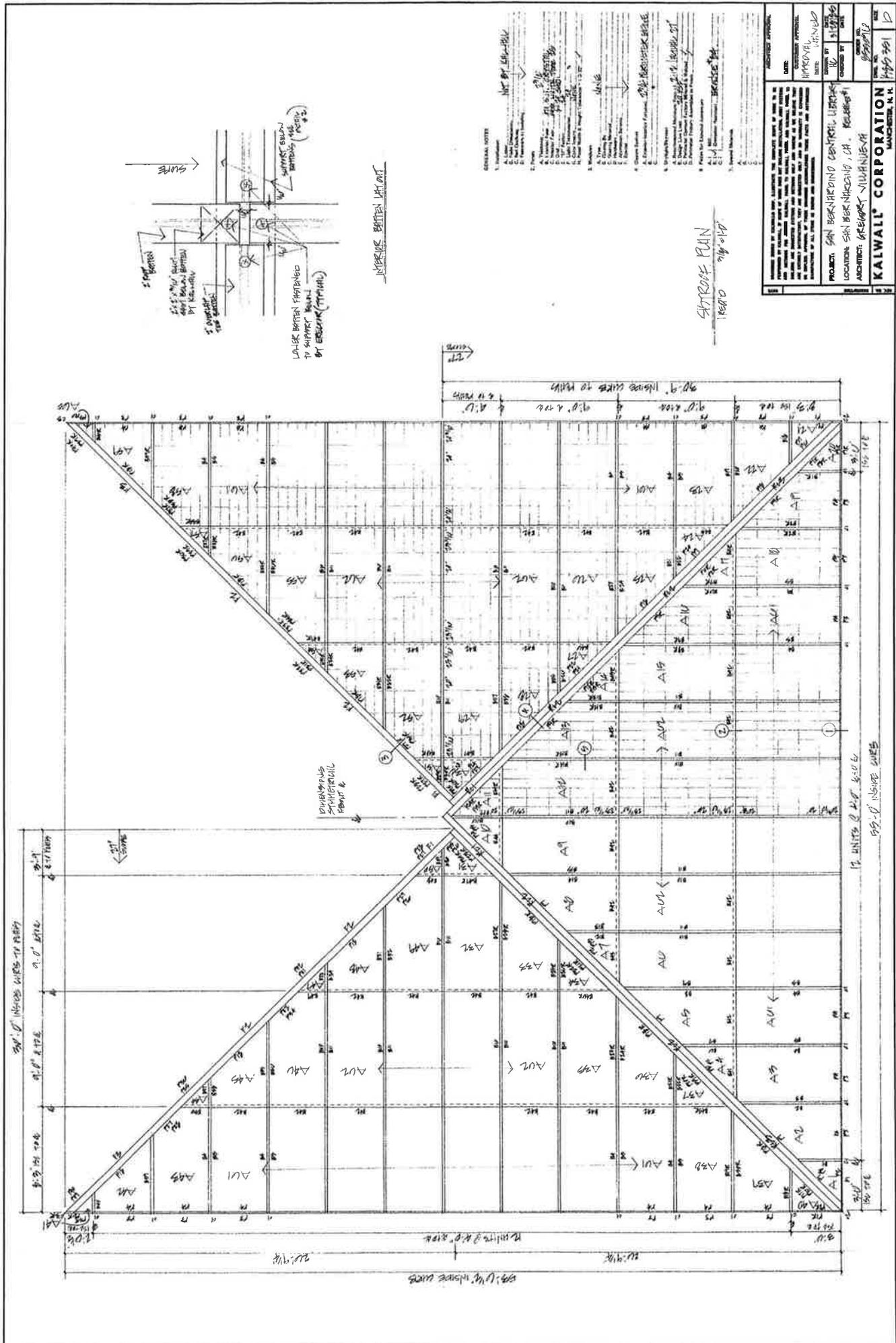
FEDERAL MINIMUM WAGES

(Applicable 10 Business Days prior to the Date of Bid Opening
To be inserted into Contract before Award and Execution of the Contract)

**FOR
STATE OF CALIFORNIA
COUNTY OF SAN BERNARDINO**

APPENDIX

ROOF PLANS



INTERIOR BRITTEN LAYOUT

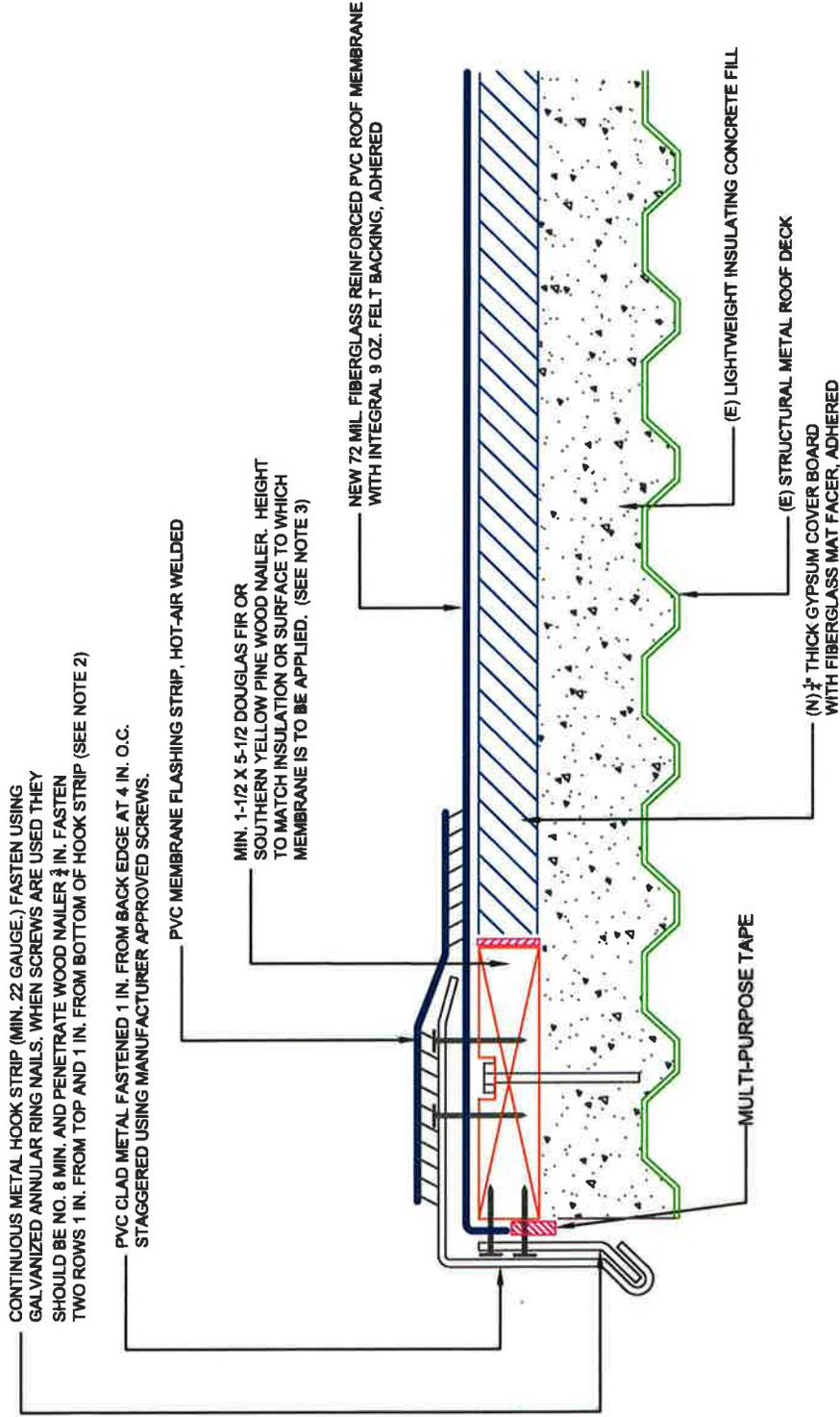
LATER BRITTEN FRAMING TO SUPPORT BEAM BY BRITTEN (TYPICAL)

SUN

- GENERAL NOTE
1. Foundation
 2. Floor Slab
 3. Wall
 4. Column
 5. Beam
 6. Deck
 7. Staircase
 8. Elevation
 9. Section
 10. Detail
 11. Section
 12. Section
 13. Section
 14. Section
 15. Section
 16. Section
 17. Section
 18. Section
 19. Section
 20. Section

DATE	APPROVED	DATE	BY
1/15/20	1/15/20	1/15/20	1/15/20
PROJECT	LOCATION	ARCHITECT	SCALE
SAN BERNARDINO CENTRAL LIBRARY	SAN BERNARDINO, CA	BRUNNEN	1/4" = 1'-0"
KALLWALD CORPORATION WASHINGTON, N.H.			

SHEET: 17-B



CONTINUOUS METAL HOOK STRIP (MIN. 22 GAUGE.) FASTEN USING GALVANIZED ANNULAR RING NAILS. WHEN SCREWS ARE USED THEY SHOULD BE NO. 8 MIN. AND PENETRATE WOOD NAILER $\frac{3}{4}$ IN. FASTEN TWO ROWS 1 IN. FROM TOP AND 1 IN. FROM BOTTOM OF HOOK STRIP (SEE NOTE 2)

PVC CLAD METAL FASTENED 1 IN. FROM BACK EDGE AT 4 IN. O.C. STAGGERED USING MANUFACTURER APPROVED SCREWS.

PVC MEMBRANE FLASHING STRIP, HOT-AIR WELDED

MIN. 1-1/2 X 5-1/2 DOUGLAS FIR OR SOUTHERN YELLOW PINE WOOD NAILER. HEIGHT TO MATCH INSULATION OR SURFACE TO WHICH MEMBRANE IS TO BE APPLIED. (SEE NOTE 3)

NEW 72 MIL FIBERGLASS REINFORCED PVC ROOF MEMBRANE WITH INTEGRAL 9 OZ. FELT BACKING, ADHERED

MULTI-PURPOSE TAPE

(N) $\frac{1}{2}$ " THICK GYPSUM COVER BOARD WITH FIBERGLASS MAT FACER, ADHERED

(E) LIGHTWEIGHT INSULATING CONCRETE FILL

(E) STRUCTURAL METAL ROOF DECK

NOTE:

- 1) WOOD NAILERS SHALL BE ATTACHED ACCORDING TO THE DESIGNERS SEPC. OR LOCAL CODE, WHICHEVER IS MORE STRINGENT.
- 2) WITHDRAWAL RESISTANCE SHOULD BE 100 LB PER NAIL MIN. FOR HOOK STRIP, ANNULAR RING NAILS SHOULD PENETRATE 1 $\frac{3}{4}$ " INTO WOOD NAILER.
- 3) EXISTING WOOD NAILERS SHALL BE SECURED PER FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-49 RECOMMENDATIONS.
- 4) FOLLOW FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-49
- 5) POSITION THE PVC MEMBRANE (NON FELTED) OVER THE ROOF EDGE AND DOWN THE OUTSIDE FACE OF WALL, COVERING TREATED WOOD NAILER(S) COMPLETELY.

PVC CLAD METAL EDGE - HIGH WIND

DWG BY: R.A.

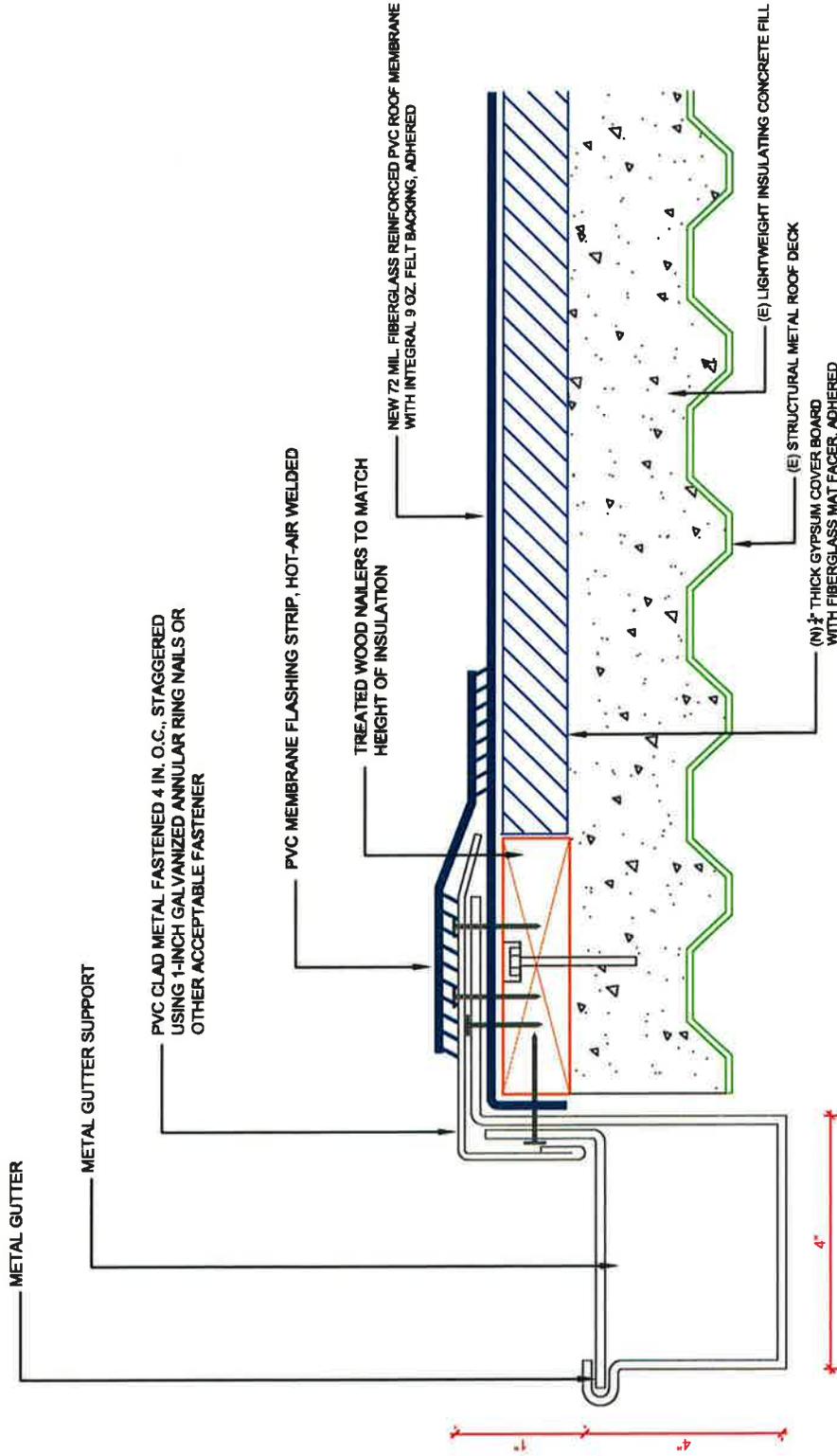
DATE: 3/31/16

DWG #: 1.1A

SCALE: N.T.S.

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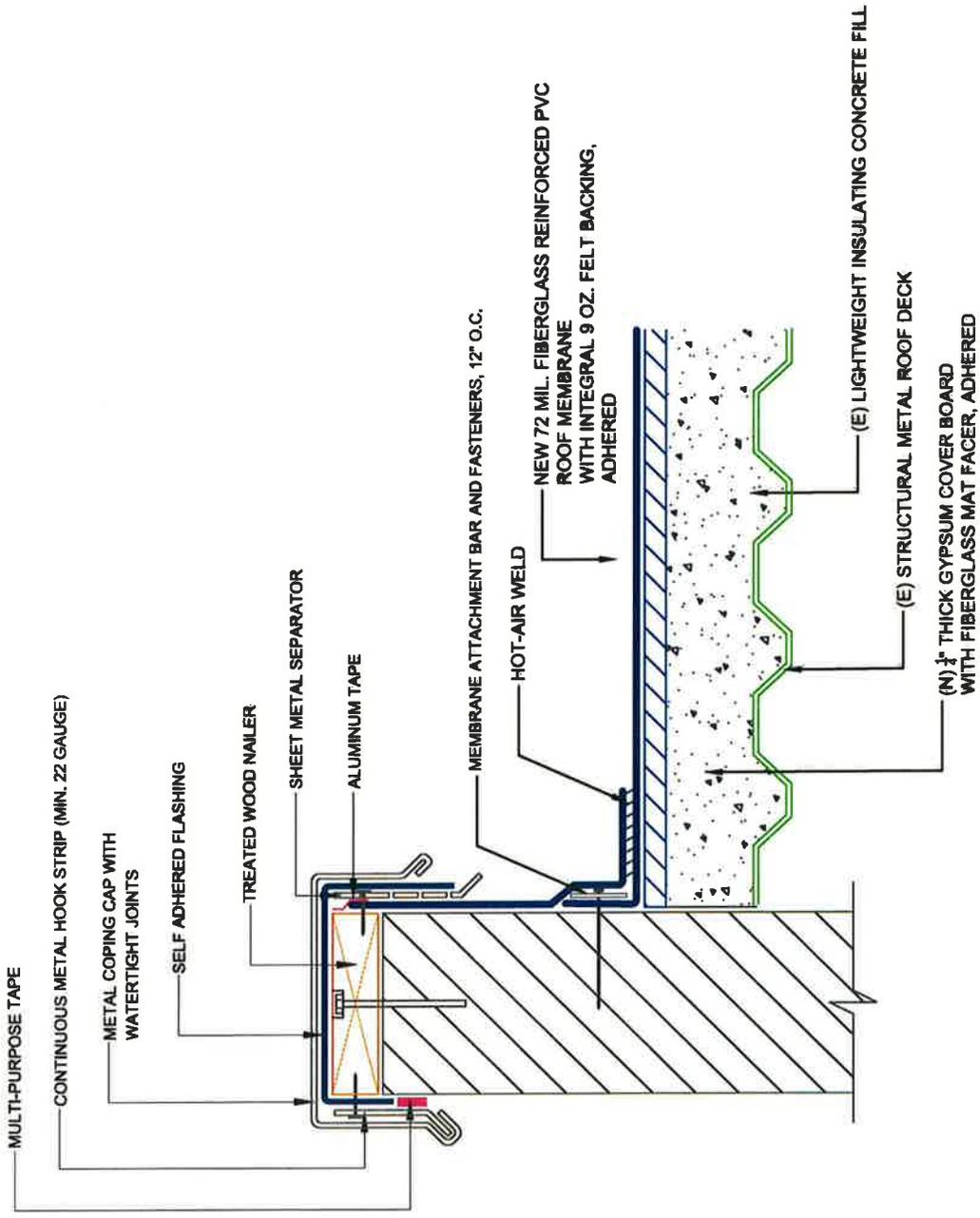


NOTE:

- 1) NAILERS SHALL BE SECURELY ANCHORED TO THE DECK TO RESIST A MINIMUM FORCE OF 300 POUNDS PER LINEAR FOOT. FOLLOW FACTORY MUTUAL LOSS PREVENTION DATA SHEET 1-49 RECOMMENDATIONS.
- 2) THE THICKNESS OF THE NAILER SHALL MATCH THE HEIGHT OF THE INSULATION OR SURFACE TO WHICH THE MEMBRANE IS TO BE APPLIED.
- 3) POSITION THE PVC MEMBRANE (NON-FELTED) OVER THE ROOF EDGE AND DOWN THE OUTSIDE FACE OF WALL, COVERING THE TREATED WOOD NAILER(S) COMPLETELY.

GUTTER EDGE

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555 WEST 6TH ST. SAN BERNARDINO, CA	
DWG BY: R.A.	DATE: 3/31/16
DWG #: 1.8	SCALE: N.T.S.



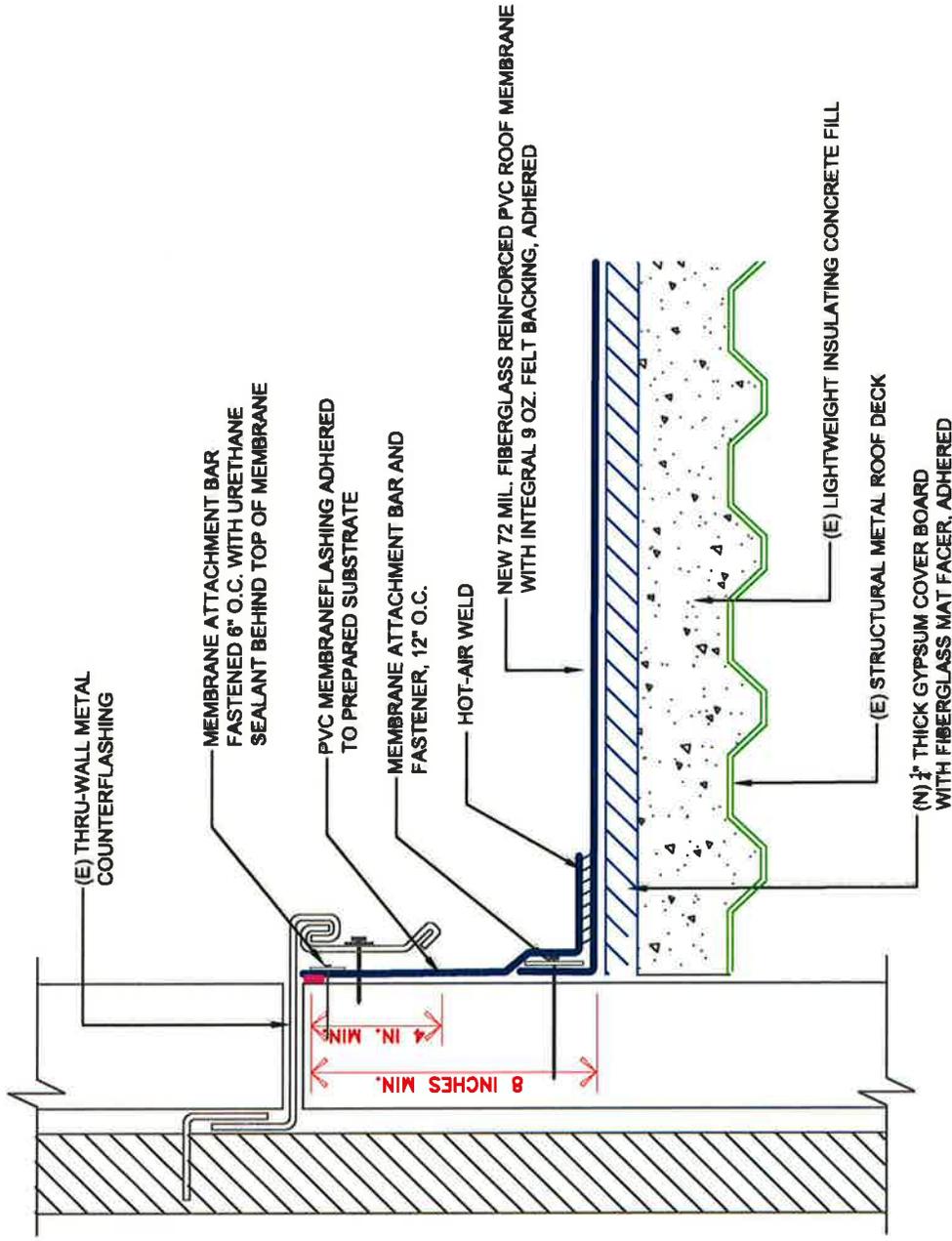
NOTE:

1) NAILERS SHALL BE SECURELY ANCHORED TO THE DECK TO RESIST A MINIMUM FORCE OF 300 POUNDS PER LINEAR FOOT. REFER TO FACTORY MUTUAL DATA SHEET 1-49.

PARAPET WALL WITH METAL COPING CAP

DWG BY: R.A.
DATE: 3/31/16
DWG #: 2.3
SCALE: N.T.S.

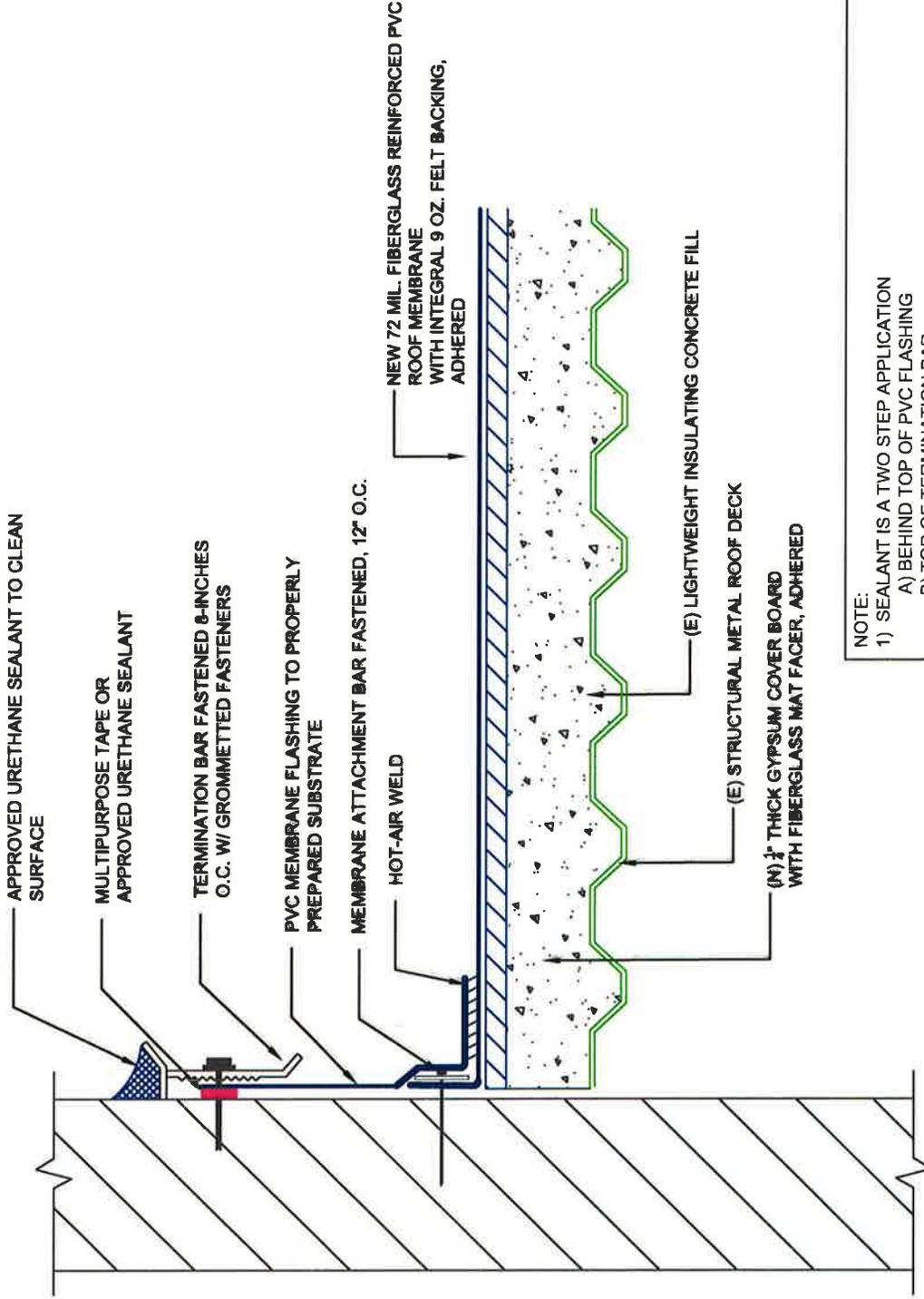
NORMAN F. FELDHEYM CENTRAL LIBRARY
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NOTE:
 1) METAL EXTENDER PIECE IS REQUIRED IF EXISTING COUNTERFLASHING IS CONTAMINATED AND OR COUNTERFLASHING FASCIA IS LESS THAN 4 IN. WIDE.
 2) METAL COUNTERFLASHING IS TO BE INSTALLED TO MEET LOCAL CODES AND REQUIREMENTS.

**VERTICAL PARAPET WALL FLASHING
 RE-USE EXISTING COUNTERFLASHING**

<p>NORMAN F. FELDHEYM CENTRAL LIBRARY 555 WEST 6TH ST. SAN BERNARDINO, CA</p>		DWG BY: R.A.
		DATE: 3/31/16
DWG #: 3.1	SCALE: N.T.S.	

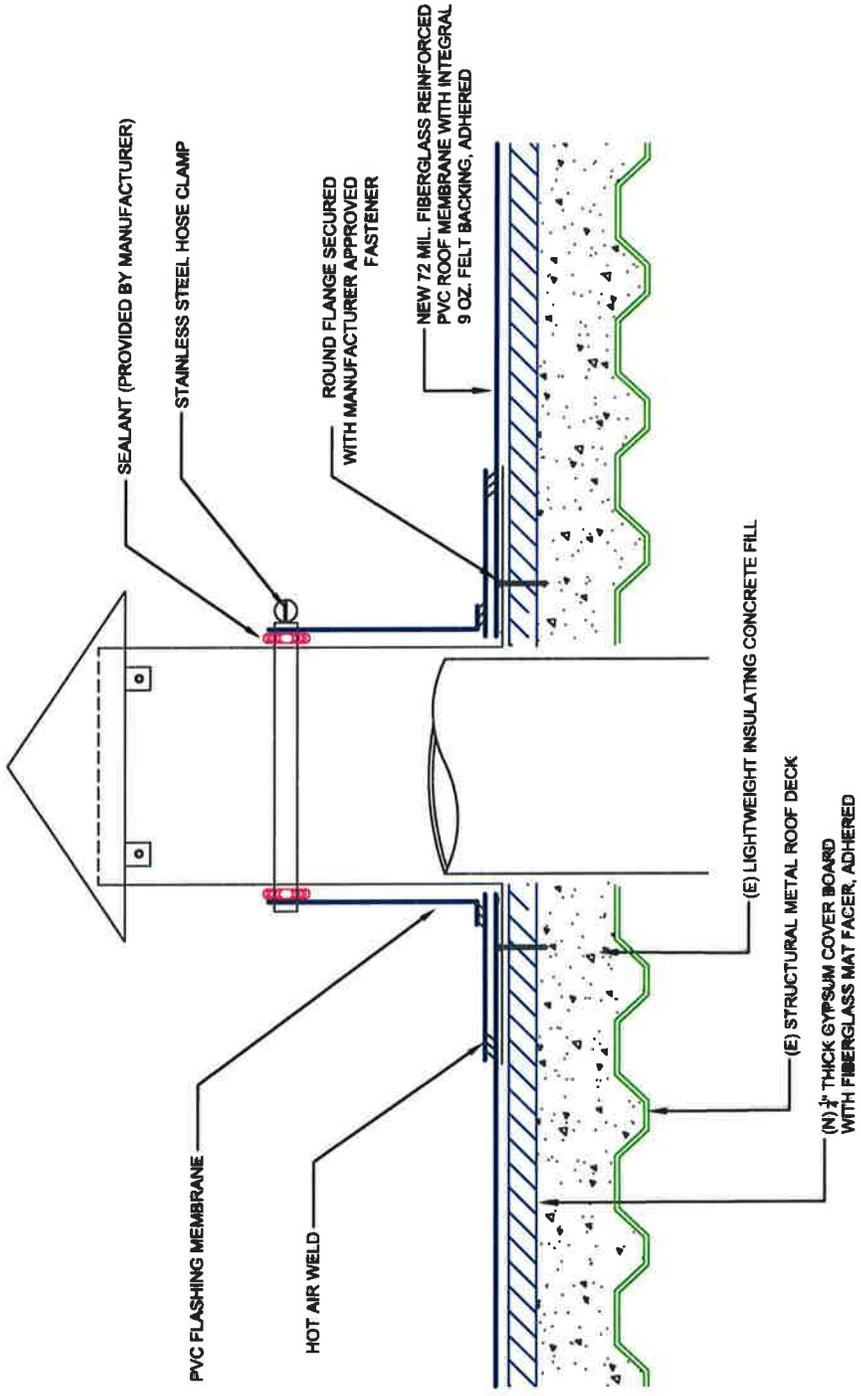


NOTE:

- 1) SEALANT IS A TWO STEP APPLICATION
 - A) BEHIND TOP OF PVC FLASHING
 - B) TOP OF TERMINATION BAR
- 2) SEALANT SHALL BE APPLIED TO CLEAN ACCEPTABLE SURFACES
- 3) SEALANT IS A MAINTENANCE ITEM. MAINTENANCE IS NOT COVERED UNDER WARRANTY.
- 4) TERMINATION BAR SHALL BE SECURELY ANCHORED WITH GROMMETTED FASTENERS AND PROVIDE ADEQUATE COMPRESSION OF MEMBRANE FLASHING AND SEALANT.

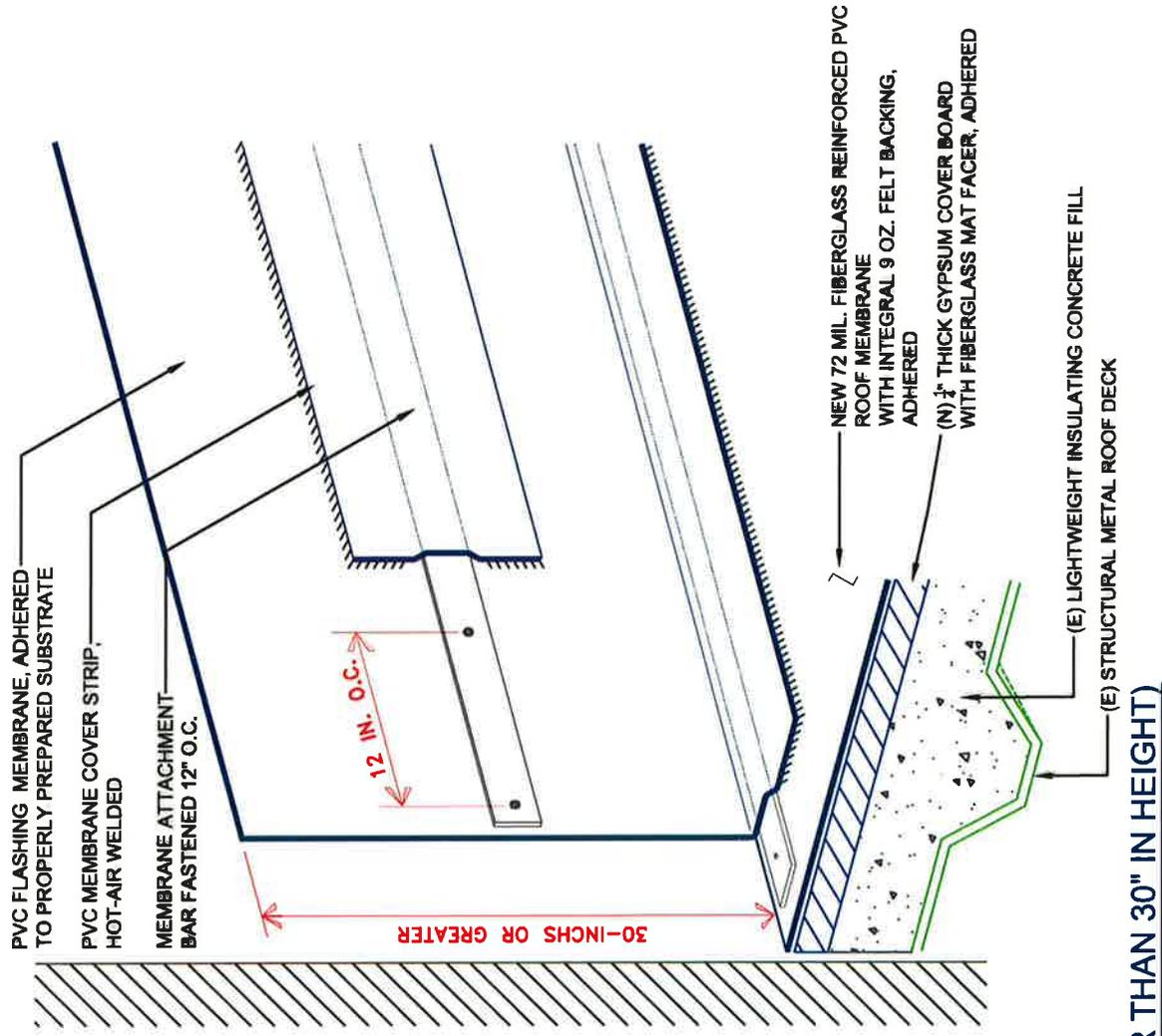
VERTICAL FLASHING WITH TERMINATION BAR

NORMAN F. FELDHEYM CENTRAL LIBRARY		DWG BY: R.A.
555 WEST 6TH ST. SAN BERNARDINO, CA		DATE: 3/31/16
DWG #: 3.3	SCALE: N.T.S.	



CHINA VENT FLASHING- GALVANIZED

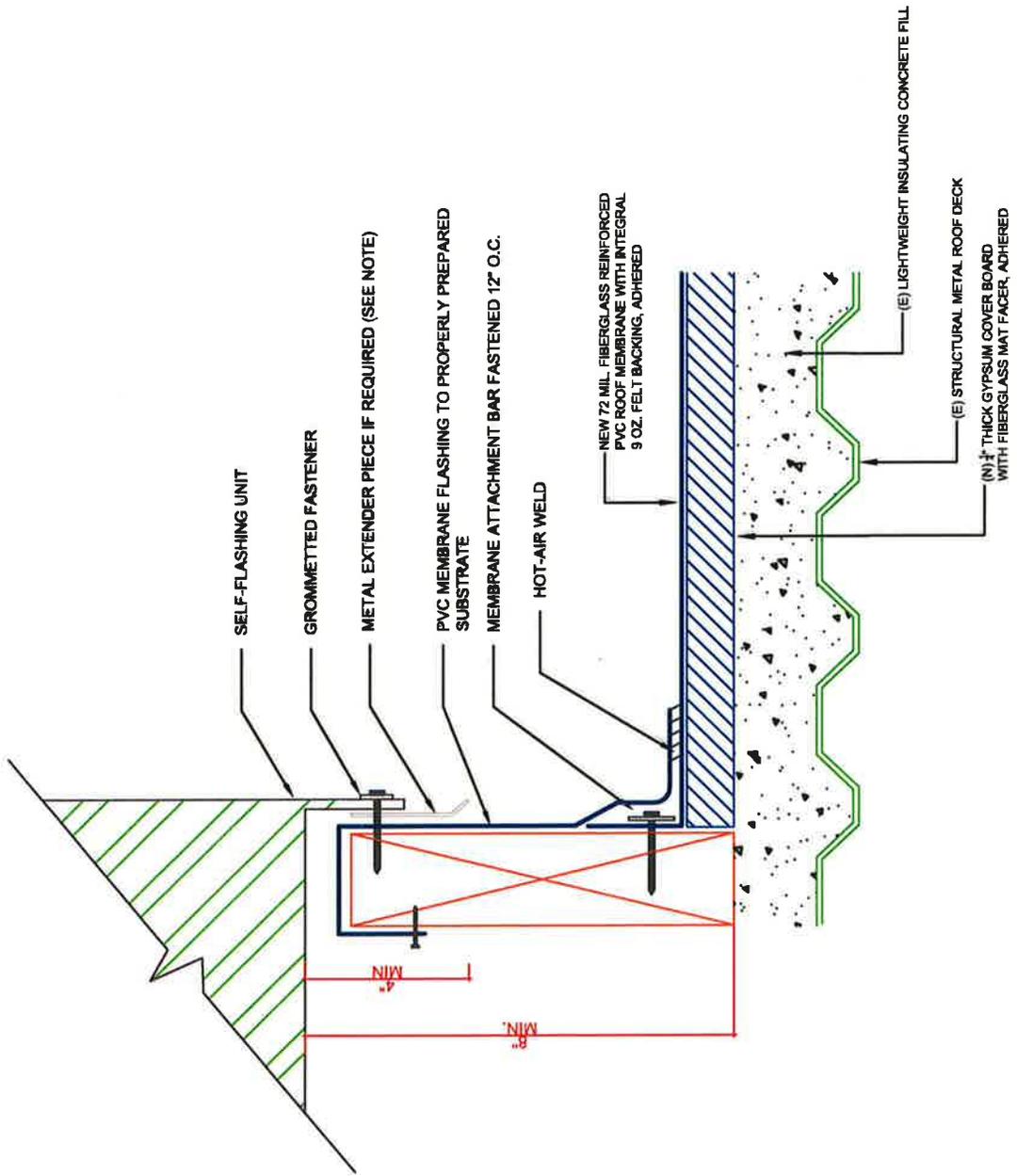
<p>NORMAN F. FELDHEYM CENTRAL LIBRARY 555 WEST 6TH ST. SAN BERNARDINO, CA</p>		DWG BY: R.A.
		DATE: 3/31/16
DWG #: 3.4	SCALE: N.T.S.	



**ADHERED WALL FLASHING
(FOR WALL FLASHINGS GREATER THAN 30" IN HEIGHT)**

DWG BY: R.A.
DATE: 3/31/16
DWG #: 3.6B
SCALE: N.T.S.

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SELF-FLASHING UNIT

GROMMETTED FASTENER

METAL EXTENDER PIECE IF REQUIRED (SEE NOTE)

PVC MEMBRANE FLASHING TO PROPERLY PREPARED SUBSTRATE

MEMBRANE ATTACHMENT BAR FASTENED 12" O.C.

HOT-AIR WELD

NEW 72 MIL FIBERGLASS REINFORCED PVC ROOF MEMBRANE WITH INTEGRAL 9 OZ. FELT BACKING, ADHERED

(E) LIGHTWEIGHT INSULATING CONCRETE FILL

(E) STRUCTURAL METAL ROOF DECK

(N) 1/2" THICK GYPSUM COVER BOARD WITH FIBERGLASS MAT FACER, ADHERED

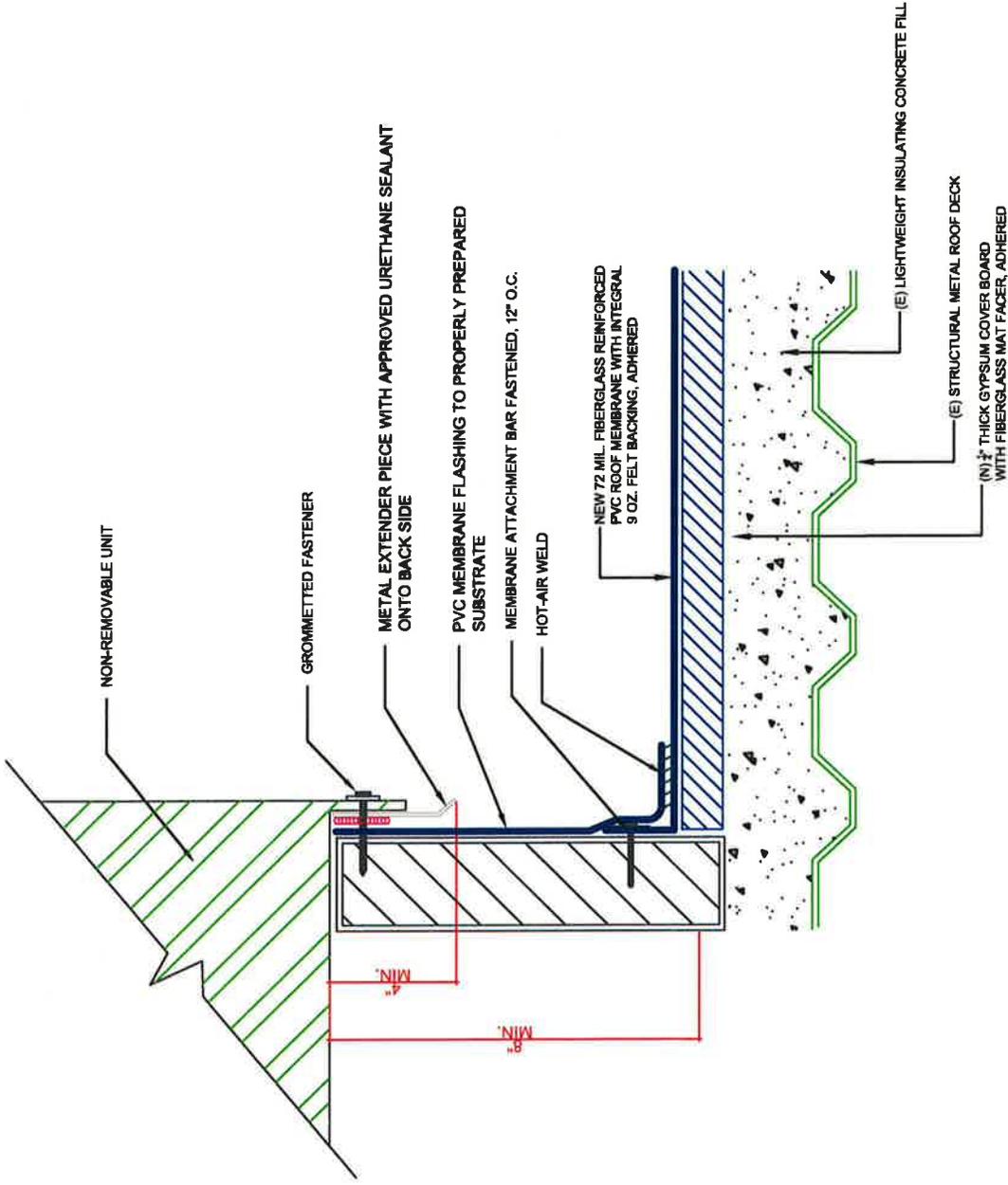
4" MIN

12" MIN

NOTE:
 METAL EXTENDER PIECE IS REQUIRED IF EXISTING COUNTERFLASHING IS CONTAMINATED AND OR COUNTERFLASHING FASCIA IS LESS THAN 4 IN. WIDE FASTENED 12 IN. O.C. WITH GROMMETTED FASTENER.

REMOVABLE CURB FLASHING

NORMAN F. FELDHEYM CENTRAL LIBRARY		DWG BY: R.A.
555 WEST 6TH ST. SAN BERNARDINO, CA		DATE: 3/31/16
	DWG #: 5.1	SCALE: N.T.S.



NOTE:
 METAL EXTENDER PIECE IS REQUIRED IF EXISTING COUNTERFLASHING IS CONTAMINATED
 AND OR COUNTERFLASHING FASCIA IS LESS THAN 4 IN. WIDE FASTENED 12 IN. O.C. WITH
 GROMMETTED FASTENER.

NON-REMOVABLE CURB FLASHING

DWG BY: R.A.

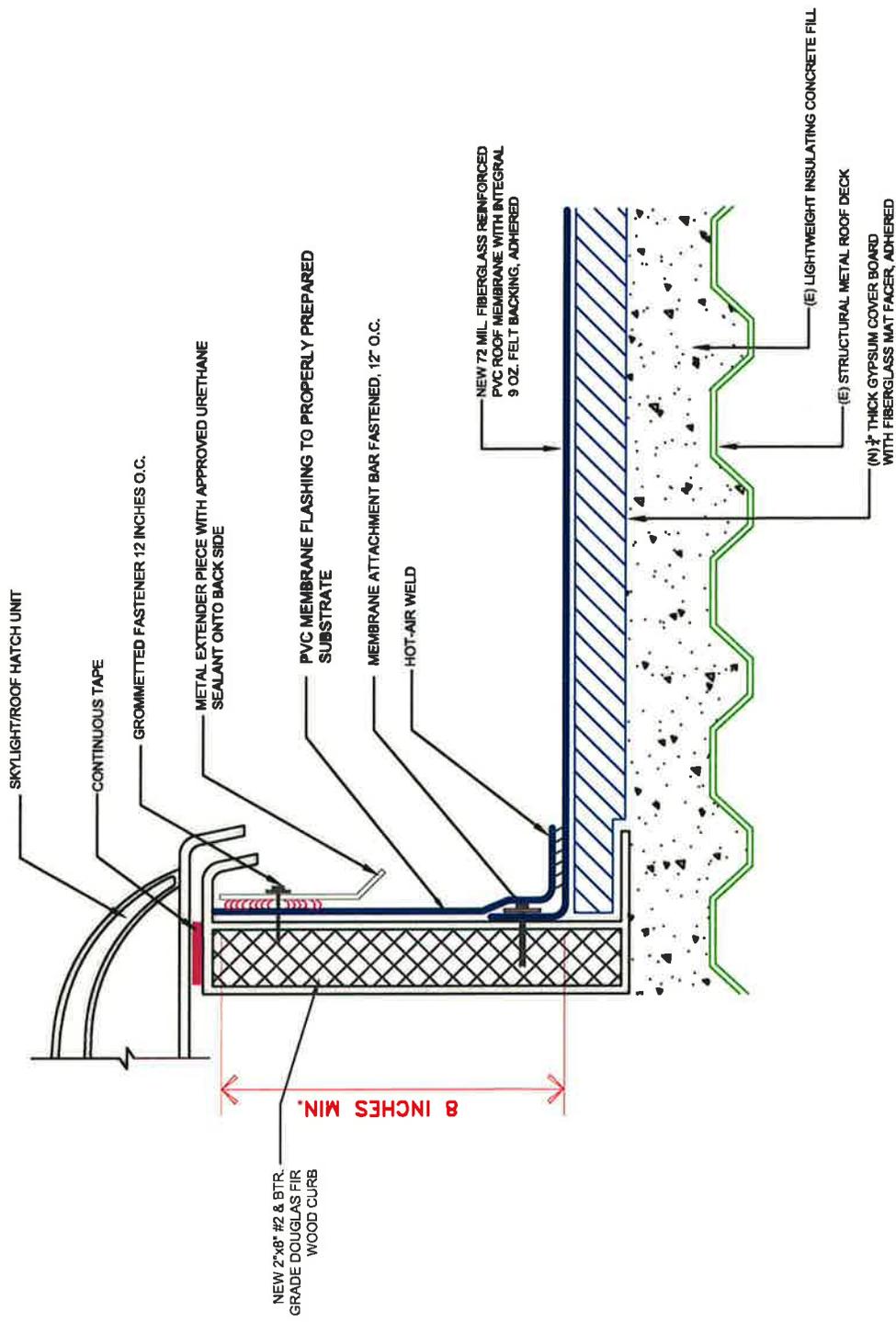
DATE: 3/31/16

DWG #: 5.2

SCALE: N.T.S.

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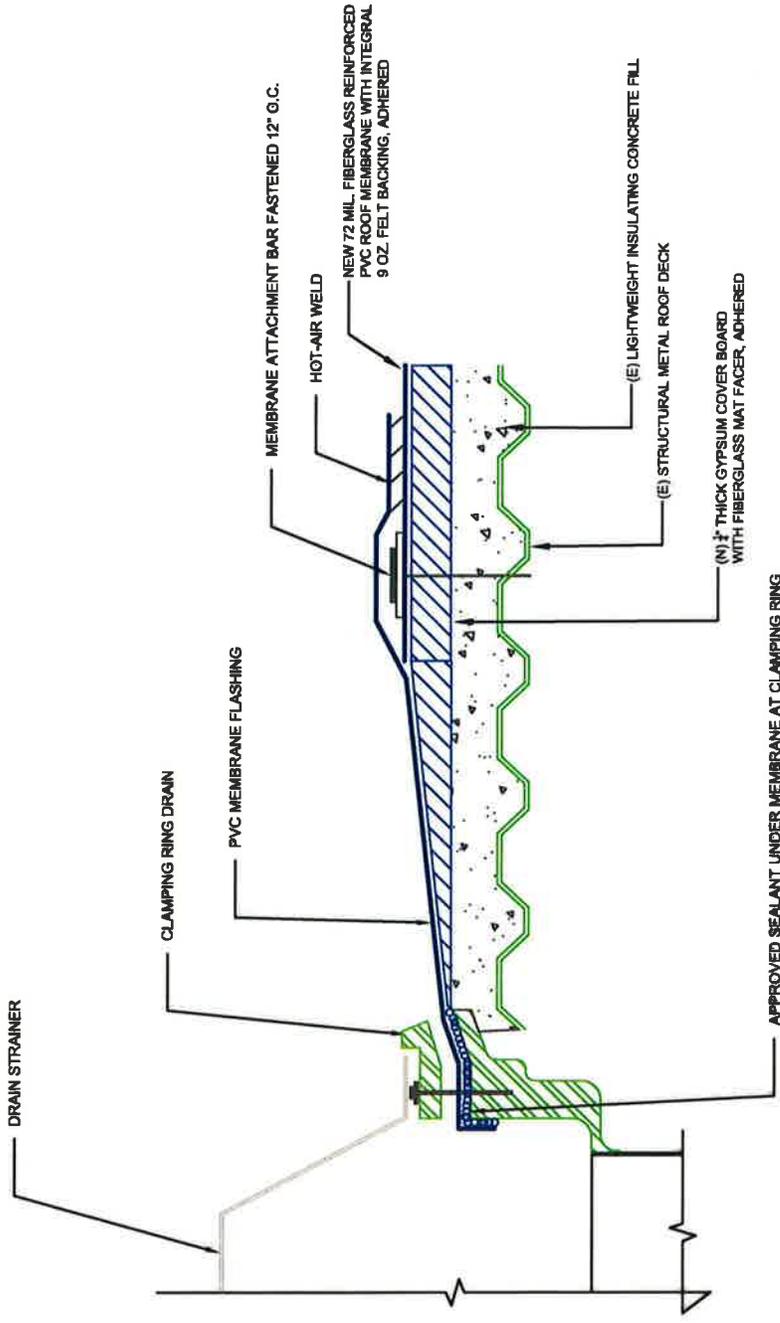


NOTE:
 METAL EXTENDER PIECE IS REQUIRED IF EXISTING COUNTERFLASHING IS CONTAMINATED
 AND OR COUNTERFLASHING FASCIA IS LESS THAN 4 IN. WIDE FASTENED 12 IN. O.C. WITH
 GROMMETTED FASTENER.

SKYLIGHT / ROOF HATCH FLASHING

DWG BY: R.A.	
DATE: 3/31/16	
DWG #: 5.3	SCALE: N.T.S.

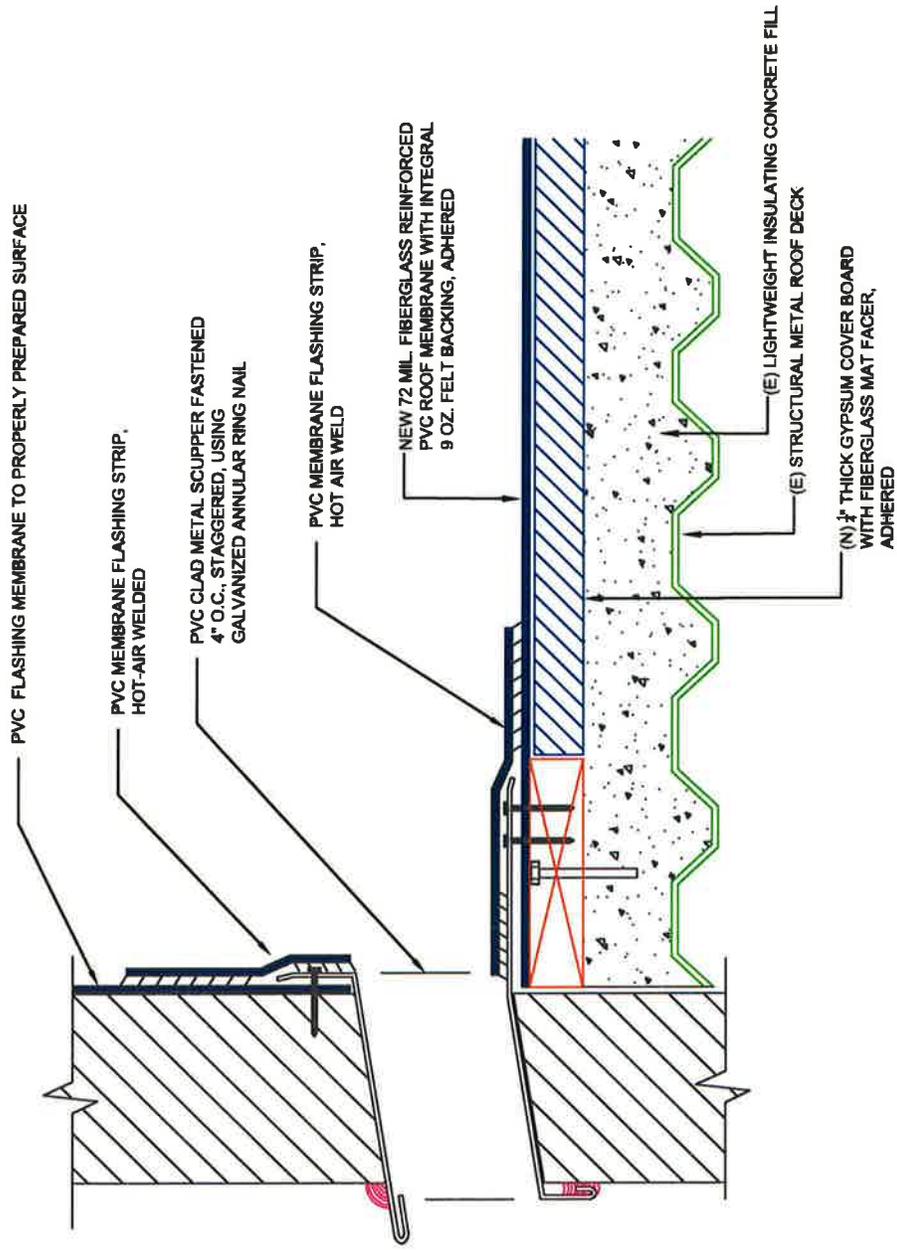
NORMAN F. FELDHEYM CENTRAL LIBRARY
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NOTE:
 1) EXISTING DRAIN BOWL, CLAMPING RING AND DRAIN ACCESSORIES ARE TO BE CLEANED FREE OF ALL CONTAMINATES.
 2) ASPHALT / OIL RESISTANT MEMBRANE MUST BE USED IN AREAS OF ASPHALT CONTAMINATION

CLAMPING RING DRAIN

NORMAN F. FELDHEYM CENTRAL LIBRARY		DWG BY: R.A.
555 WEST 6TH ST. SAN BERNARDINO, CA		DATE: 3/31/16
DWG #: 6.1	SCALE: N.T.S.	

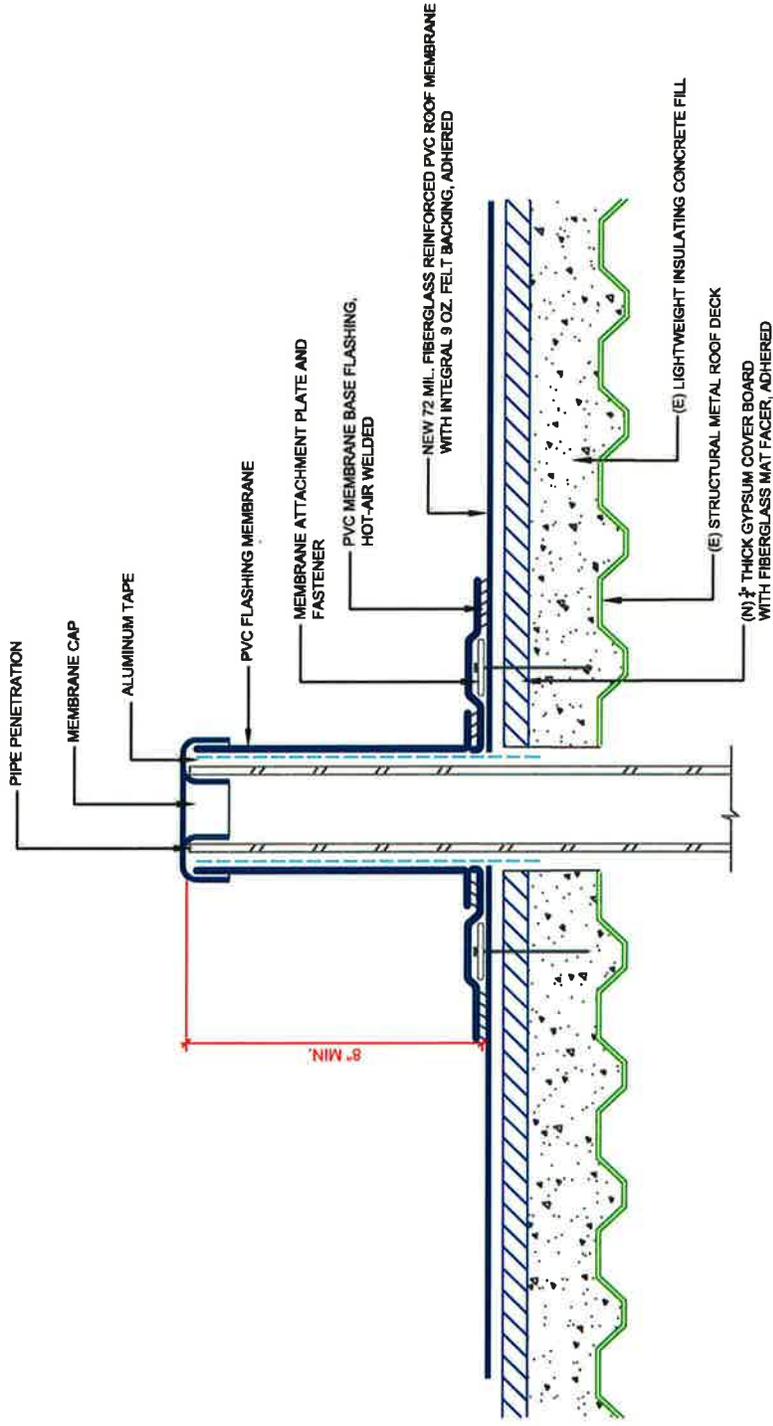


THRU-WALL SCUPPER

NOTE:
 1) NAILERS SHALL BE SECURELY ANCHORED TO THE DECK TO RESIST A MINIMUM FORCE OF 300 POUNDS PER LINEAR FOOT IN ANY DIRECTION

DWG BY: R.A.
DATE: 3/31/16
DWG #: 6.3
SCALE: N.T.S.

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NOTE:
ALUMINUM TAPE IS REQUIRED IF EXISTING PENETRATION IS CONTAMINATED.

VENT STACK FLASHING

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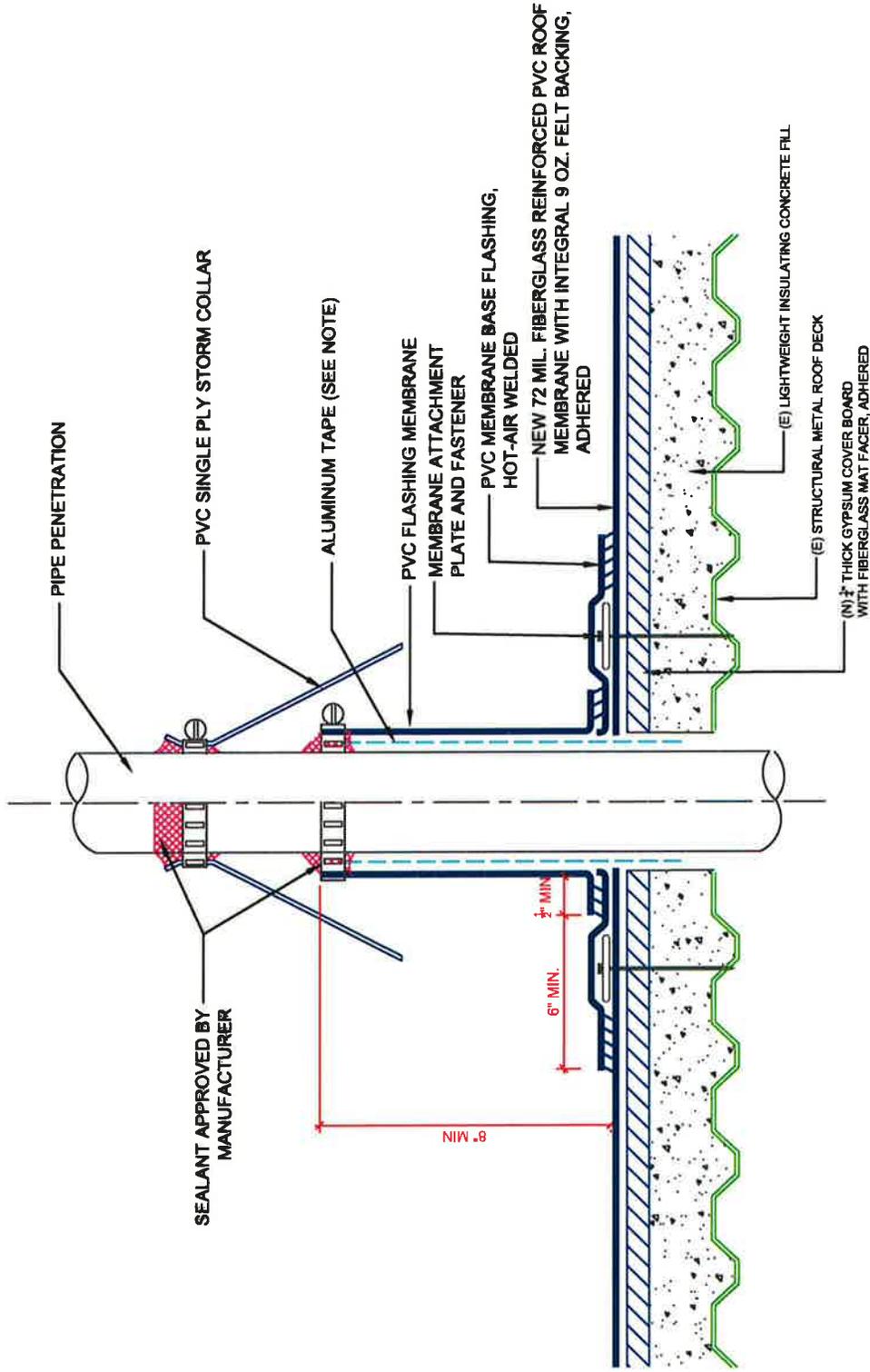
555 WEST 6TH ST. SAN BERNARDINO, CA

DWG BY: R.A.

DATE: 3/31/16

DWG #: 7.1

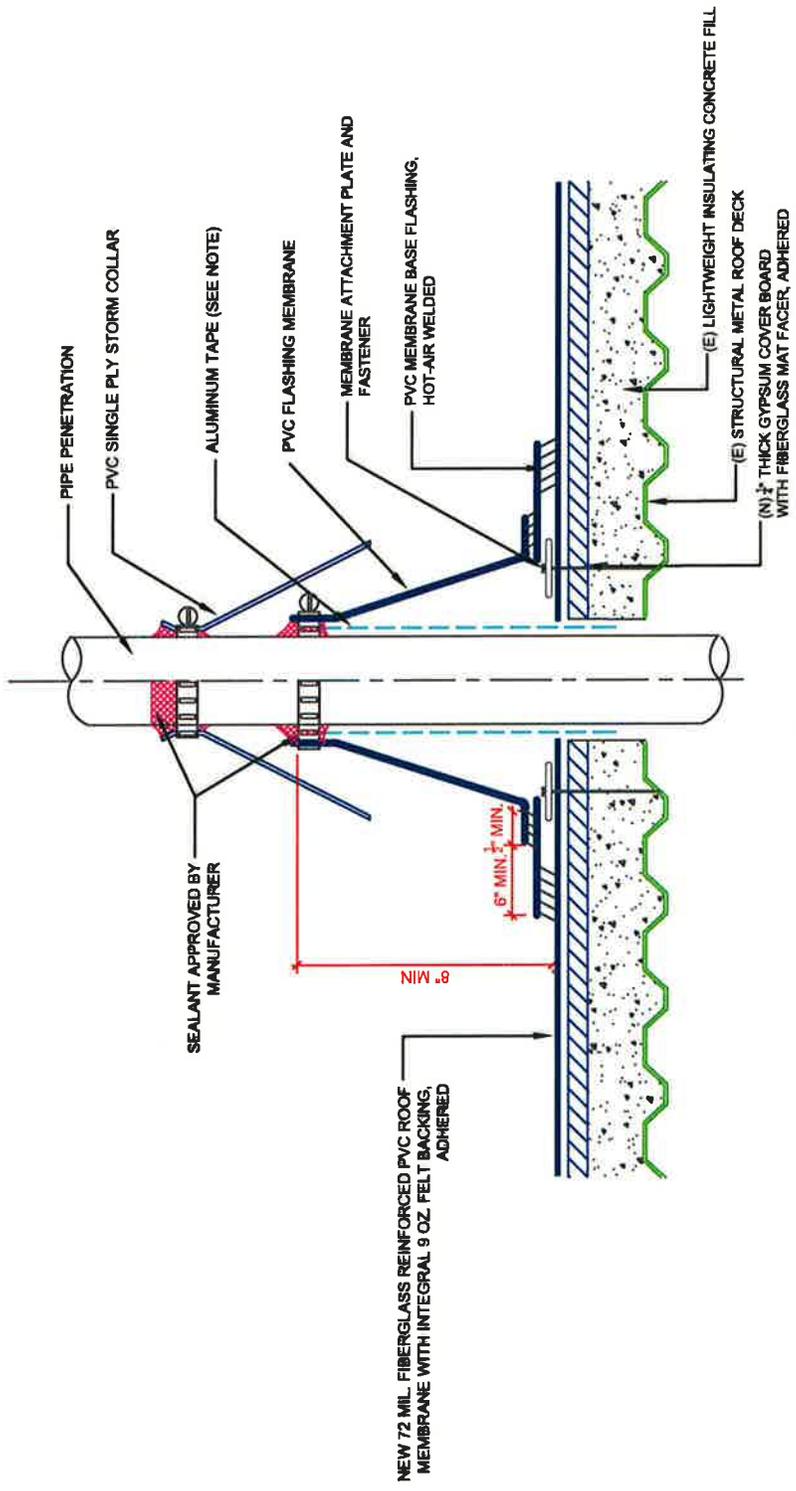
SCALE: N.T.S.



NOTE:
ALUMINUM TAPE IS REQUIRED IF EXISTING PENETRATION IS CONTAMINATED.

PIPE PENETRATION FLASHING WITH MEMBRANE COLLAR

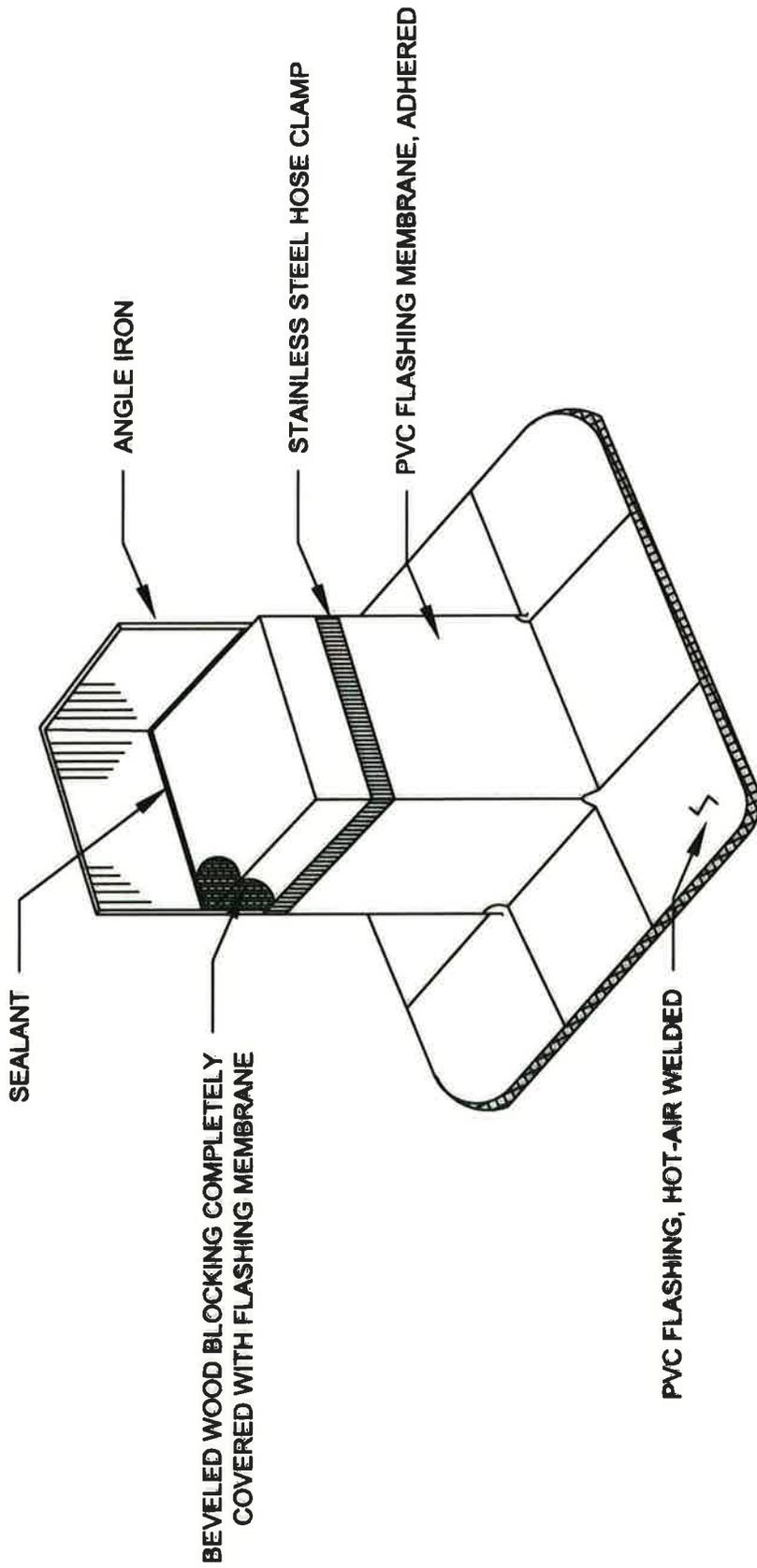
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DWG BY: R.A.	SCALE: N.T.S.
DATE: 3/31/16	
DWG #: 7.2A	



NOTE:
ALUMINUM TAPE IS REQUIRED IF EXISTING PENETRATION IS CONTAMINATED.

CONE FLASHING AT PENETRATION

<p>NORMAN F. FELDHEYM CENTRAL LIBRARY 555 WEST 6TH ST. SAN BERNARDINO, CA</p>		DWG BY: R.A.
		DATE: 3/31/16
DWG #: 7.3A	SCALE: N.T.S.	



ANGLE IRON FLASHING

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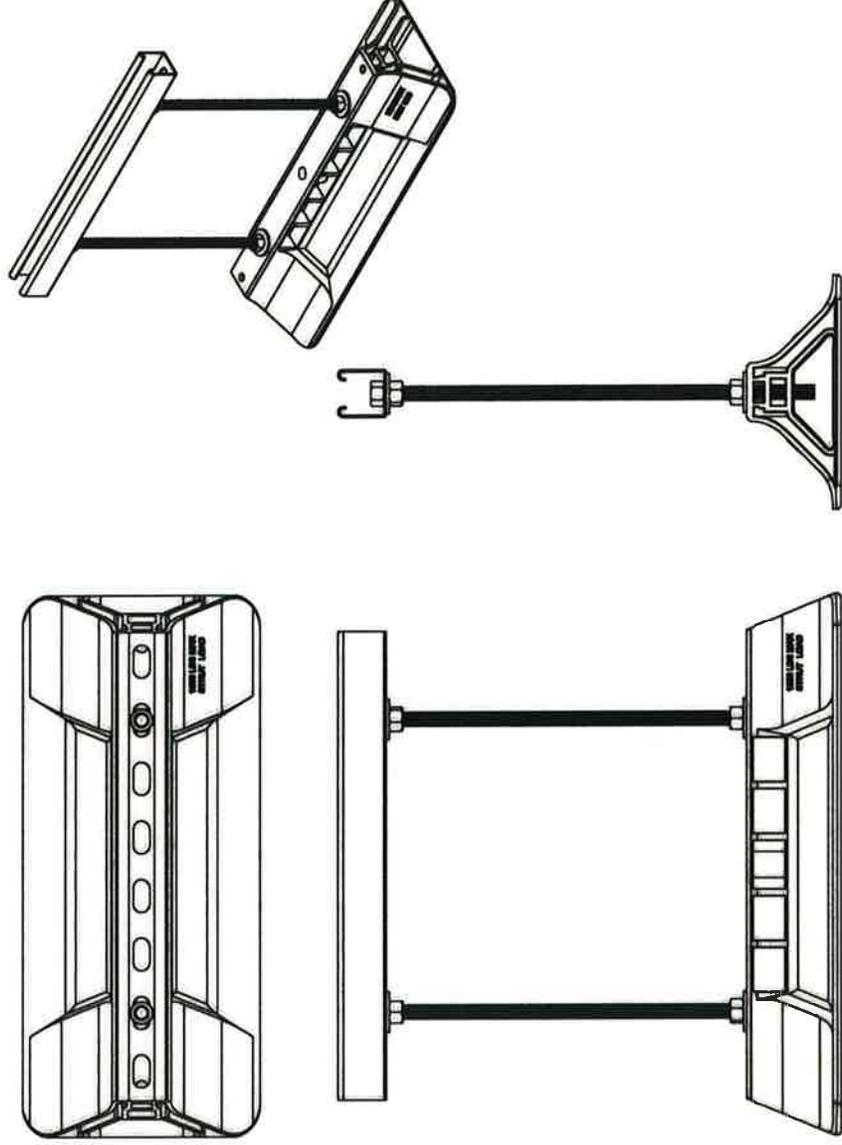
555 WEST 6TH ST. SAN BERNARDINO, CA

DWG BY: R.A.

DATE: 3/31/16

DWG #: 7.5

SCALE: N.T.S.



PRE-FABRICATED PIPE SUPPORT

DWG BY: R.A.

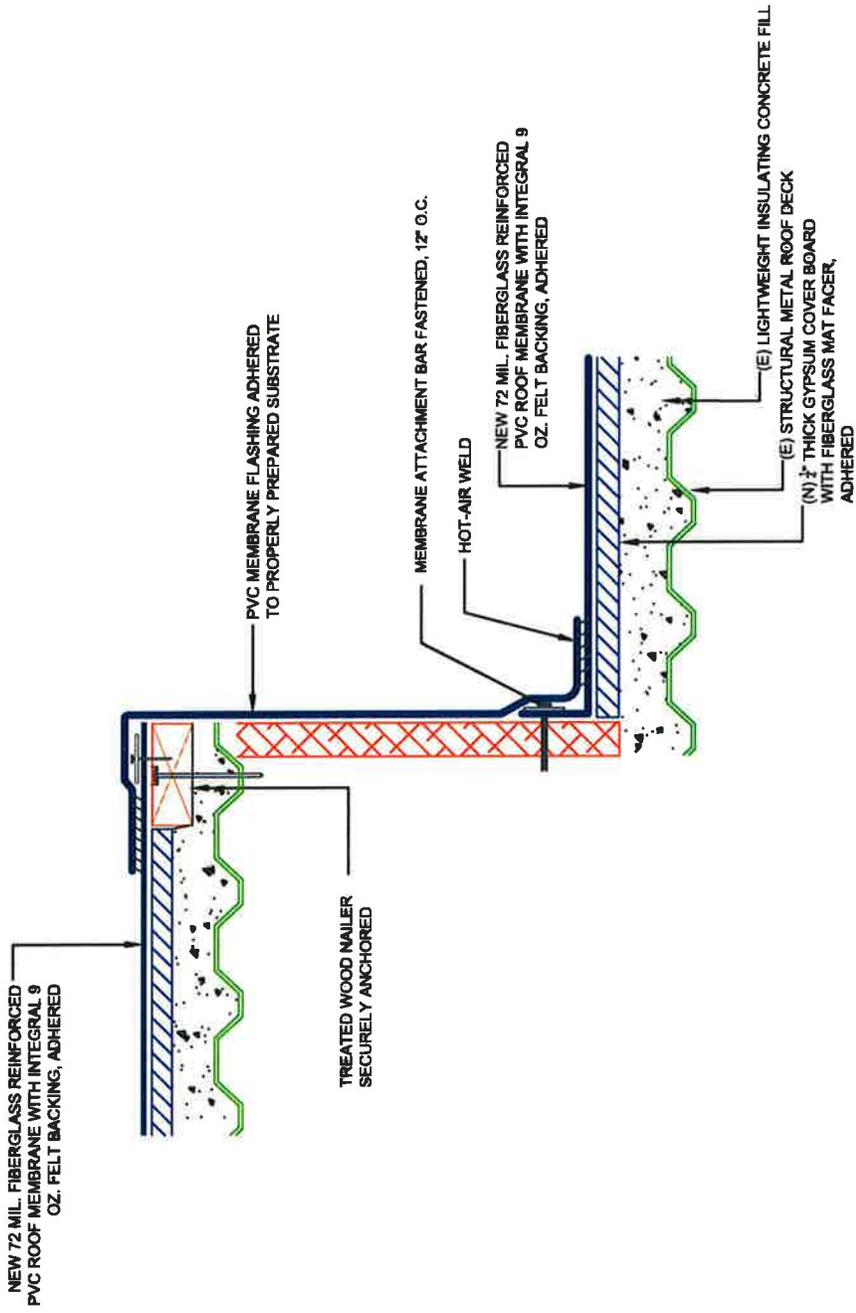
DATE: 3/31/16

DWG #: 8.2

SCALE: N.T.S.

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WALL TRANSITION

DWG BY: R.A.

DATE: 3/31/16

DWG #: 9.3

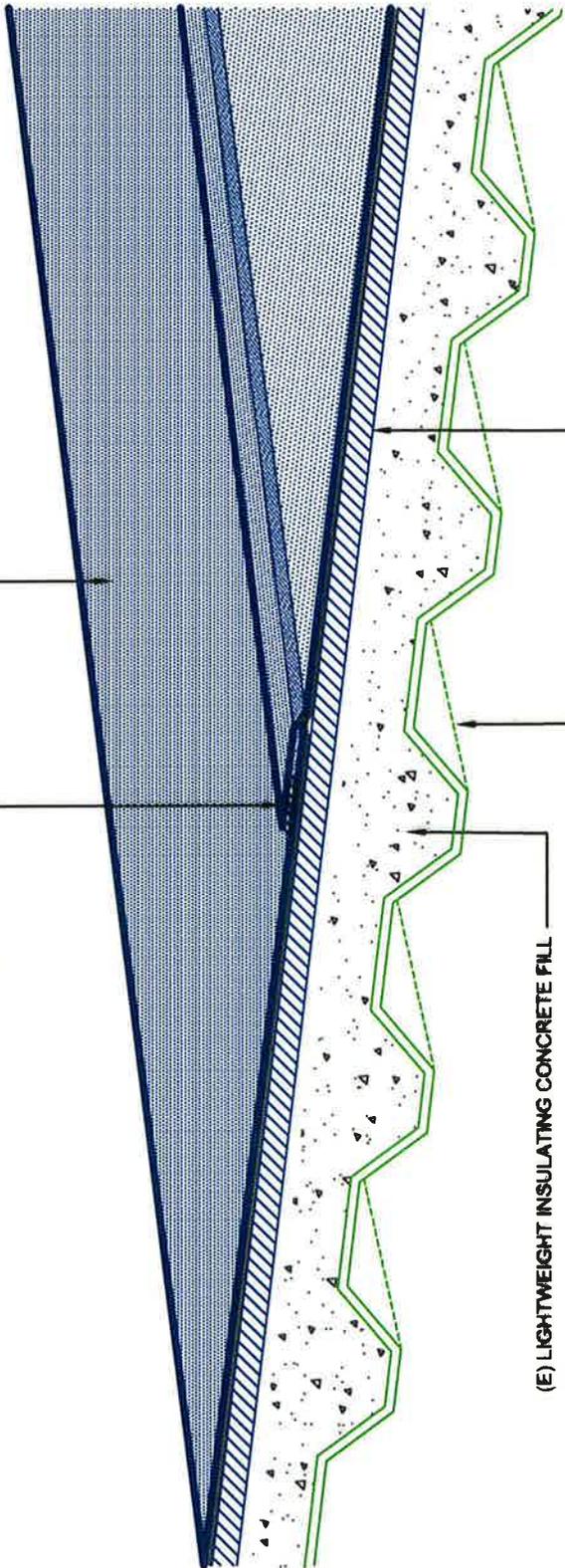
SCALE: N.T.S.

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NEW 72 MIL. FIBERGLASS REINFORCED PVC ROOF MEMBRANE
WITH INTEGRAL 9 OZ. FELT BACKING, ADHERED

HOT-AIR WELD



(E) LIGHTWEIGHT INSULATING CONCRETE FILL

(E) STRUCTURAL METAL ROOF DECK

(N) 1/2" THICK GYPSUM COVER BOARD
WITH FIBERGLASS MAT FACER, ADHERED

CROSS SECTION

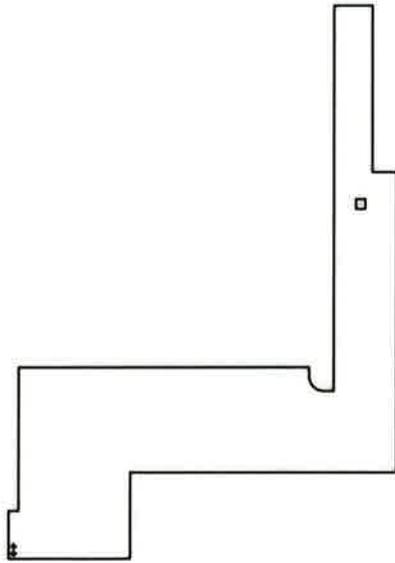
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DATE: 3/31/16

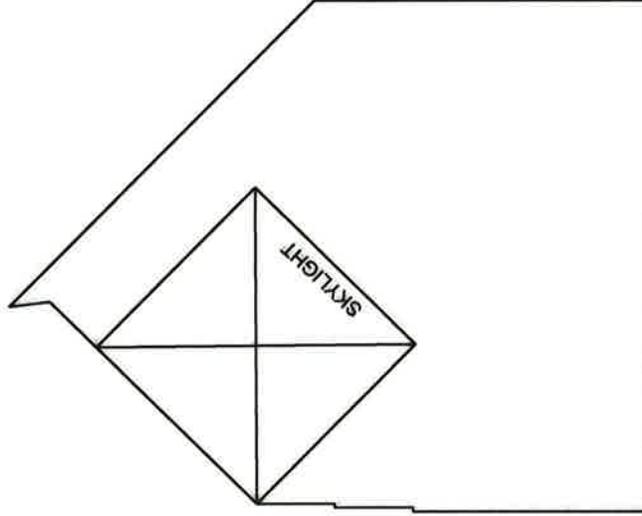
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SCALE: N.T.S.

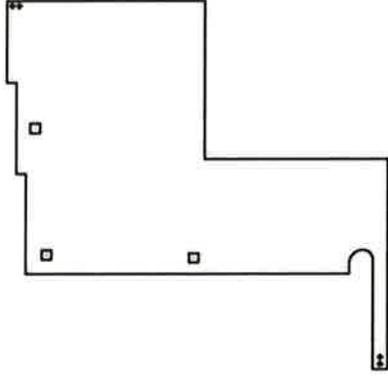
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LOWER (SW)



LOWER (NE)



LOWER (SE)

UPPER ROOF DRAWING

DWG BY: R.A.

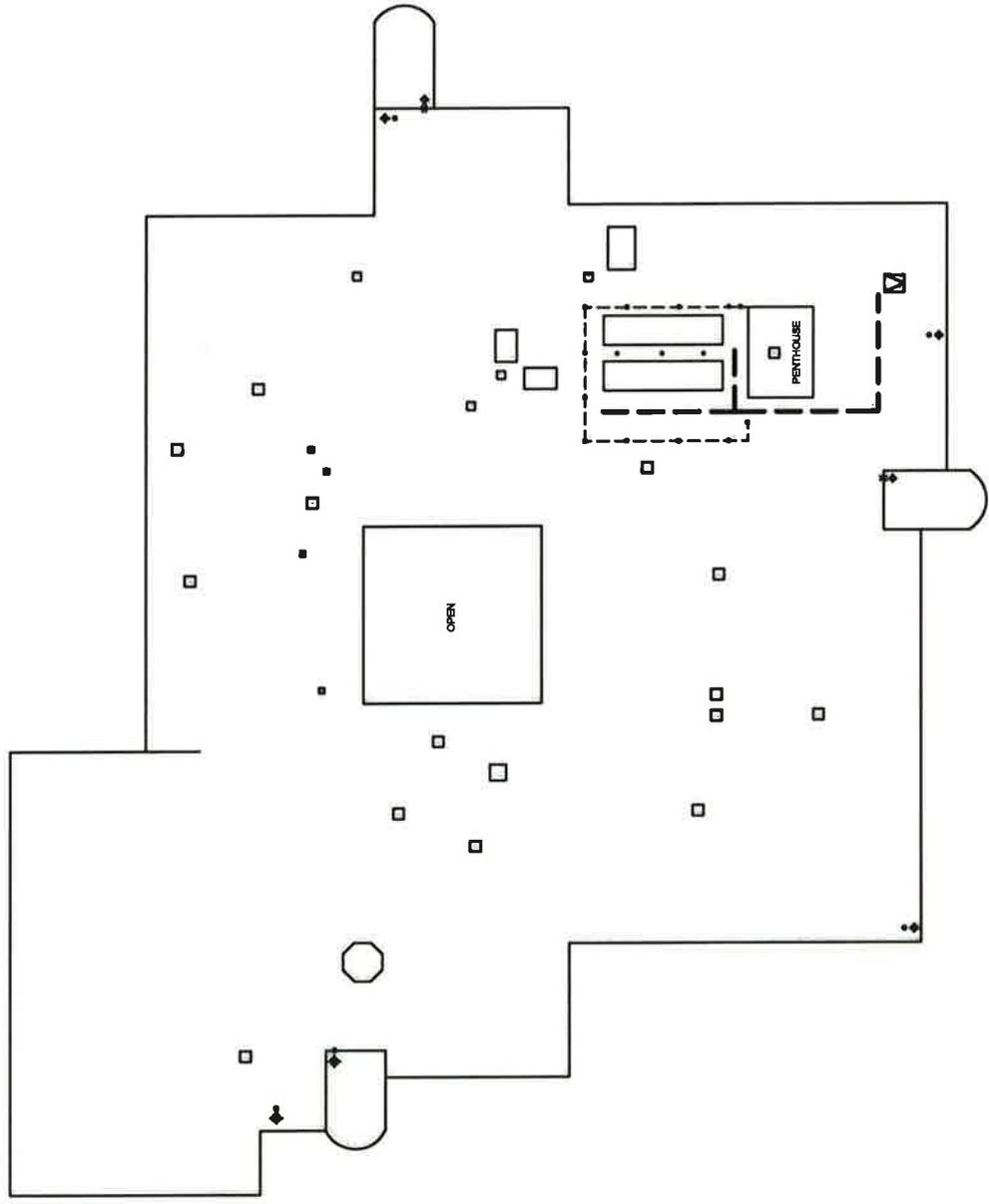
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SCALE: N.T.S.

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UPPER ROOF DRAWING

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DWG BY: R.A.

DATE: 3/31/16

DWG #

SCALE: N.T.S.

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
& FEDERAL CODE OF REGULATIONS
APPRENTICESHIP PROGRAM
FOR PUBLIC WORKS CONSTRUCTION

EXCERPTS FROM THE CALIFORNIA LABOR CODE RELATING TO APPRENTICES ON PUBLIC WORKS

Chapter 1 of Division 2 APPRENTICES ON PUBLIC WORKS

1773.3. An awarding agency whose public works contract falls within the jurisdiction of Section 1777.5 shall, within five days of the award, send a copy of the award to the Division of Apprenticeship Standards. When specifically requested by a local joint apprenticeship committee, the division shall notify the local joint apprenticeship committee regarding all such awards applicable to the joint apprenticeship committee making the request. Within five days of a finding of any discrepancy regarding the ratio of apprentices to journeymen, pursuant to the certificated fixed number of apprentices to journeymen, the awarding agency shall notify the Division of Apprenticeship Standards.

1776. (a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, 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 him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following: (1) The information contained in the payroll record is true and correct. (2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis: (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request. (2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations. (3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of the contractor.

(c) The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number. A joint labor management committee may maintain an action in a court of competent jurisdiction against an employer who fails to comply with Section 1774. The court may award restitution to an employee for unpaid wages and may award the joint labor management committee reasonable attorney's fee and costs incurred in maintaining the action. An action under this subdivision may not be based on the employer's misclassification of the craft of a worker on its certified payroll records. Nothing in this subdivision limits any other available remedies for a violation of this chapter.

(f) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

(g) The contractor or subcontractor shall have 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty-five dollars (\$25) 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, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(h) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

(i) The director shall adopt rules consistent with the California Public

Records Act, (Chapter 3.5 (commencing with Section 6250), Division 7, Title 1, Government Code) and the Information Practices Act of 1977, (Title 1.8 (commencing with Section 1798), Part 4, Division 3, Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

(j) This section shall remain in effect only until January 1, 2003, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2003, deletes or extends that date.

1776. (a) Each contractor and subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, and 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 him or her in connection with the public work.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis: (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request. (2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations. (3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of the contractor.

(c) The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.

(d) Each contractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated 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. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

(g) The contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the contractor must comply with this section. In the event that the contractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty-five dollars (\$25) 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, these penalties shall be withheld from progress payments then due.

(h) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. These stipulations shall fix the responsibility for compliance with this section on the prime contractor.

(i) The director shall adopt rules consistent with the California Public Records Act, (Chapter 3.5 (commencing with Section 6250), Division 7, Title 1, Government Code) and the Information Practices Act of 1977, (Title 1.8 (commencing with Section 1798), Part 4, Division 3, Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

(j) This section shall become operative January 1, 2003.

1777.5. (a) Nothing in this chapter shall prevent the employment of properly registered apprentices upon public works.

(b) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either (1) the apprenticeship standards and apprentice agreements under which he or she is training or (2) the rules and regulations of the California Apprenticeship Council.

(d) When the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in

the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (a).

(e) Prior to commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program that can supply apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates where the contractor agrees to be bound by those standards, but, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Chief of the Division of Apprenticeship Standards, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section that has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or that has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Chief of the Division of Apprenticeship Standards may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met: (1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent. (2) The number of apprentices in training in the area exceeds a ratio of 1 to 5. (3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis. (4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(l) When an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors will not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m) (1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2) At the conclusion of each fiscal year, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Division of Apprenticeship Standards for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The funds shall be distributed as follows: (A) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made. (B) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and geographic area for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices registered in each program. (C) All training contributions not distributed under subparagraphs (A) and (B) shall be used to defray the future expenses of administering this subdivision. (3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which fund is hereby created in the State Treasury. Notwithstanding Section 13340 of the Government Code, all money in the Apprenticeship Training Contribution Fund is hereby continuously appropriated for the purpose of carrying out this subdivision and to pay the expenses of the division in administering this subdivision.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) All decisions of an apprenticeship program under this section are subject to Section 3081.

1777.6. It shall be unlawful for an employer or a labor union to refuse to accept otherwise qualified employees as registered apprentices on any public works, on the ground of the race, religious creed, color, national origin, ancestry, sex, or age, except as provided in Section 3077, of such employee.

1777.7. (a) (1) A contractor or subcontractor that is determined by the Chief of the Division of Apprenticeship Standards to have knowingly violated Section 1777.5 shall forfeit as a civil penalty an amount not exceeding one hundred dollars (\$100) for each full calendar day of noncompliance. The amount of this penalty may be reduced by the Chief if the amount of the penalty would be disproportionate to the severity of the violation. A contractor or subcontractor that knowingly commits a second or subsequent violation of Section 1777.5 within a three-year period, where the noncompliance results in apprenticeship training not being provided as required by this chapter, shall forfeit as a civil penalty the sum of not more than three hundred dollars (\$300) for each full calendar day of noncompliance. Notwithstanding Section 1727, upon receipt of a determination that a civil penalty has been imposed by the Chief, the awarding body shall withhold the amount of the civil penalty from contract progress payments then due or to become due. (2) In lieu of the penalty provided for in this subdivision, the Chief may, for a first-time violation and with the concurrence of an apprenticeship program described in subdivision (d), order the contractor or subcontractor to provide apprentice employment equivalent to the work hours that would have been provided for apprentices during the period of noncompliance.

(b) In the event a contractor or subcontractor is determined by the Chief to have knowingly committed a serious violation of any provision of Section 1777.5, the Chief may also deny to the contractor or subcontractor, and to its responsible officers, the right to bid on or be awarded or perform work as a subcontractor on any public works contract for a period of up to one year for the first violation and for a period of up to three years for a second or subsequent violation. Each period of debarment shall run from the date the determination of noncompliance by the Chief becomes a final order of the Administrator of Apprenticeship.

(c) (1) An affected contractor, subcontractor, or responsible officer may obtain a review of the determination of the Chief imposing the debarment or civil penalty by transmitting a written request to the office of the Administrator within 30 days after service of the determination of debarment or civil penalty. A copy of this request shall also be served on the Chief. If the Administrator does not receive a timely request for review of the determination of debarment or civil penalty made by the Chief, the order shall become the final order of the Administrator. (2) Within 20 days of the timely receipt of a request for review, the Chief shall provide the contractor, subcontractor, or responsible officer the opportunity to review any evidence the Chief may offer at the hearing. The Chief shall also promptly disclose any nonprivileged documents obtained after the 20-day time limit at a time set forth for exchange of evidence by the Administrator. (3) Within 90 days of the timely receipt of a request for review, a hearing shall be commenced before the Administrator or an impartial hearing officer designated by the Administrator and possessing the qualifications of an administrative law judge pursuant to subdivision (b) of Section 11502 of the Government Code. The affected contractor, subcontractor, or responsible officer shall have the burden of providing evidence of compliance with Section 1777.5. (4) Within 45 days of the conclusion of the hearing, the Administrator shall issue a written decision affirming, modifying, or dismissing the determination of debarment or civil penalty. The decision shall contain a statement of the factual and legal basis for the decision and an order. This decision shall be served on all parties and the awarding body pursuant to Section 1013 of the Code of Civil Procedure by first-class mail at the last known address of the party that the party has filed with the Administrator. Within 15 days of issuance of the decision, the Administrator may reconsider or modify the decision to correct an error, except that a clerical error may be corrected at any time. (5) An affected contractor, subcontractor, or responsible officer who has timely requested review and obtained a decision under paragraph (4) may obtain review of the decision of the Administrator by filing a petition for a writ of mandate to the appropriate superior court pursuant to Section 1094.5 of the Code of Civil Procedure within 45 days after service of the final decision. If no timely petition for a writ of mandate is filed, the decision shall become the final order of the

Administrator. The decision of the Administrator shall be affirmed unless the petitioner shows that the Administrator abused his or her discretion. If the petitioner claims that the findings are not supported by the evidence, abuse of discretion is established if the court determines that the findings are not supported by substantial evidence in light of the entire record. (6) The Chief may certify a copy of the final order of the Administrator and file it with the clerk of the superior court in any county in which the affected contractor or subcontractor has property or has or had a place of business. The clerk, immediately upon the filing, shall enter judgment for the state against the person assessed in the amount shown on the certified order. A judgment entered pursuant to this section shall bear the same rate of interest and shall have the same effect as other judgments and be given the same preference allowed by the law on other judgments rendered for claims for taxes. The clerk shall not charge for the service performed by him or her pursuant to this section. An awarding body that has withheld funds in response to a determination by the Chief imposing a penalty under this section shall, upon receipt of a certified copy of a final order of the Administrator, promptly transmit the withheld funds, up to the amount of the certified order, to the Administrator.

(d) If a subcontractor is found to have violated Section 1777.5, the prime contractor of the project is not liable for any penalties under subdivision (a), unless the prime contractor had knowledge of the subcontractor's failure to comply with the provisions of Section 1777.5 or unless the prime contractor fails to comply with any of the following requirements: (1) The contract executed between the contractor and the subcontractor or the performance of work on the public works project shall include a copy of the provisions of Sections 1771, 1775, 1776, 1777.5, 1813, and 1815. (2) The contractor shall continually monitor a subcontractor's use of apprentices required to be employed on the public works project pursuant to subdivision (d) of Section 1777.5, including, but not limited to, periodic review of the certified payroll of the subcontractor. (3) Upon becoming aware of a failure of the subcontractor to employ the required number of apprentices, the contractor shall take corrective action, including, but not limited to, retaining funds due the subcontractor for work performed on the public works project until the failure is corrected. (4) Prior to making the final payment to the subcontractor for work performed on the public works project, the contractor shall obtain a declaration signed under penalty of perjury from the subcontractor that the subcontractor has employed the required number of apprentices on the public works project.

(e) Any funds withheld by the awarding body pursuant to this section shall be deposited in the General Fund if the awarding body is a state entity, or in the equivalent fund of an awarding body if the awarding body is an entity other than the state.

(f) The Chief shall consider, in setting the amount of a monetary penalty, in determining whether a violation is serious, and in determining whether and for how long a party should be debarred for violating this section, all of the following circumstances: (1) Whether the violation was intentional. (2) Whether the party has committed other violations of Section 1777.5. (3) Whether, upon notice of the violation, the party took steps to voluntarily remedy the violation. (4) Whether, and to what extent, the violation resulted in lost training opportunities for apprentices. (5) Whether, and to what extent, the violation otherwise harmed apprentices or apprenticeship programs. If a party seeks review of a decision by the Chief to impose a monetary penalty or period of debarment, the Administrator shall decide de novo the appropriate penalty, by considering the same factors set forth above.

(g) The interpretation of Section 1777.5 and this section shall be in accordance with the regulations of the California Apprenticeship Council. The Administrator may adopt regulations to establish guidelines for the imposition of monetary penalties and periods of debarment and may designate precedential decisions under Section 11425.60 of the Government Code.

NOTE: THE ABOVE CALIFORNIA LABOR CODE SECTIONS ARE AVAILABLE FROM THE INTERNET @ www.dir.ca.gov/.

DAS 10 (Rev. 04-02)

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF APPRENTICESHIP STANDARDS
455 Golden Gate Avenue, 10th Floor
San Francisco, CA 94102
Tel: (415) 703-4920
Fax: (415) 703-5477

EDMUND G. BROWN, Jr., Governor

www.dir.ca.gov



ADDRESS REPLY TO:
Div. of Apprenticeship Standards
P. O. Box 420603
San Francisco, CA 94142-0603

Important Notice Regarding Changes in CCR 230.1

An addition has been made to section 230.1 regarding employment of apprentices on public works it is effective as of November 16, 2011. To see a copy of the amended regulation please click on the following link: <http://www.dir.ca.gov/das/DasRegulations/201011Regs320Text.pdf>

In general, for covered projects, “except for projects with less than 40 hours of journeyman work”, for the purpose of determining whether a contractor has properly requested an apprentice, all requests for dispatch of an apprentice “shall be for not less than 8 hours per day per each apprentice or 20% of the estimated apprentice hours” required to meet ratio whichever is greater.

AMENDMENT TO CALIFORNIA CODE OF REGULATIONS,

TITLE 8, CHAPTER 2, PART IV, SECTION 230.1

§ 230.1. Employment of Apprentices on Public Works.

(a) Contractors, as defined in Section 228 to include general, prime, specialty or subcontractor, shall employ registered apprentice(s), as defined by Labor Code Section 3077, during the performance of a public work project in accordance with the required one hour of work performed by an apprentice for every five hours of labor performed by a journeyman, unless covered by one of the exemptions enumerated in Labor Code Section 1777.5 or this subchapter. Unless an exemption has been granted, the contractor shall employ apprentices for the number of hours computed above before the end of the contract. Contractors who are not already employing sufficient registered apprentices (as defined by Labor Code Section 3077) to comply with the one-to-five ratio must request the dispatch of required apprentices from the apprenticeship committees providing training in the applicable craft or trade and whose geographic area of operation includes the site of the public work by giving the committee written notice of at least 72 hours (excluding Saturdays, Sundays and holidays) before the date on which one or more apprentices are required. If the apprenticeship committee from which apprentice dispatch(es) are requested does not dispatch apprentices as requested, the contractor must request apprentice dispatch(es) from another committee providing training in the applicable craft or trade in the geographic area of the site of the public work, and must request apprentice dispatch(es) from each such committee, either consecutively or simultaneously, until the contractor has requested apprentice dispatches from each such committee in the geographic area. All requests for dispatch of apprentices shall be in writing, sent by first class mail, facsimile or email. Except for projects with less than 40 hours of journeyman work, each request for apprentice dispatch shall be for not

less than an 8 hour day per each apprentice, or 20% of the estimated apprentice hours to be worked for an employer in a particular craft or trade on a project, whichever is greater, unless an employer can provide written evidence, upon request of the committee dispatching the apprentice or the Division of Apprenticeship Standards, that circumstances beyond the employer's control prevent this from occurring. If a non-signatory contractor declines to abide by and comply with the terms of a local committee's standards, the apprenticeship committee shall not be required to dispatch apprentices to such contractor. Conversely, if in response to a written request no apprenticeship committee dispatches, or agrees to dispatch during the period of the public works project any apprentice to a contractor who has agreed to employ and train apprentices in accordance with either the apprenticeship committee's standards or these regulations within 72 hours of such request (excluding Saturdays, Sundays and holidays) the contractor shall not be considered in violation of this section as a result of failure to employ apprentices for the remainder of the project, provided that the contractor made the request in enough time to meet the above-stated ratio. If an apprenticeship committee dispatches fewer apprentices than the contractor requested, the contractor shall be considered in compliance if the contractor employs those apprentices who are dispatched, provided that, where there is more than one apprenticeship committee able and willing to unconditionally dispatch apprentices, the contractor has requested dispatch from all committees providing training in the applicable craft or trade whose geographic area of operation include the site of the public work. Nothing in this section shall affect the right of a Contractor who participates in and employs registered apprentices from programs approved under Labor Code Section 3075 outside the geographic area of the public work from employing said apprentice(s) on the site of the public work in order to meet the ratio requirement of Labor Code Section 1777.5.

(b) Apprentices employed on public works shall be paid the applicable apprentice prevailing per diem wage rate, available from DAS, and derived from the Director's survey of wages paid on public works in the geographic area of the craft or trade. DAS shall refer complaints alleging any contractor's failure to pay the proper apprentice prevailing wage rate on a public works project to the Division of Labor Standards Enforcement for investigation and appropriate action.

(c) Apprentices employed on public works can only be assigned to perform work of the craft or trade to which the apprentice is registered. Work of the craft or trade consists of job duties normally assigned to journeymen in the apprenticeable occupation. Where an employer employs apprentices under the rules and regulations of the California Apprenticeship Council, as set forth in Labor Code Section 1777.5(c)(2), apprentices employed on public works must at all times work with or under the direct supervision of journeyman/men. The on-the-job training shall be in accordance with the apprenticeship standards and apprenticeship agreement under which the apprentice is training, provided that a contractor shall not be subject to any financial or administrative obligations to a trust fund or employee benefit plan unless the contractor has so agreed.

(d) The provisions of this regulation shall not apply to contractors on public works projects that were bid prior to July 1, 2009. Such contractors shall comply with the version of this regulation that was in effect prior to July 1, 2009.

Division of Apprenticeship Standards - Important notice

Change to Code of Regulations Section 230.1

Notification of Change in Regulation 230.1

Regarding Employment of Apprentices on Public Works.

- Regulation 230.1 has been amended. The change will affect projects bid after June 30, 2009. Projects bid on or before June 30, 2009 will still be controlled by the prior version of 230.1.
- The change requires all contractors (who are not already employing sufficient apprentices) to request dispatch (either consecutively or simultaneously) from all approved apprenticeship programs in the geographical area of the project.
- The change also requires that contractors who employ apprentices but are not meeting the required ratio for their craft must request dispatch from any other programs in their craft that exist in the geographical area of the project
- The change also requires contractors to give the approved apprenticeship programs written notice of the request for dispatch at least 72 hours in advance. Previously 48 hours advance notice was required.

Effective on projects bid July 1, 2009

Reg. 230.1. Employment of Apprentices on Public Works.

(a) Contractors, as defined in Section 228 to include general, prime, specialty or subcontractor, shall employ registered apprentice(s), as defined by Labor Code Section 3077, during the performance of a public work project in accordance with the required **one hour of work performed by an apprentice for every five hours of labor performed by a journeyman**, unless covered by one of the exemptions enumerated in Labor Code Section 1777.5 or this subchapter. Unless an exemption has been granted, the contractor shall employ apprentices for the number of hours computed above before the end of the contract. Contractors who are not already employing sufficient registered apprentices (as defined by Labor Code Section 3077) to comply with the one-to-five ratio must request the dispatch of required apprentices from the apprenticeship committees providing training in the applicable craft or trade and whose geographic area of operation includes the site of the public work by giving the committee written notice of at least 72 hours (excluding Saturdays, Sundays and holidays) before the date on which one or more apprentices are required. If the apprenticeship committee from which apprentice dispatch(es) are requested does not dispatch apprentices as requested, the contractor must request apprentice dispatch(es) from another committee providing training in the applicable craft or trade in the geographic area of the site of the public work, and must request apprentice dispatch(es) from each such committee, either consecutively or simultaneously, until the contractor has requested apprentice dispatches from each such committee in the geographic area. All requests for dispatch of apprentices shall be in writing, sent by first class mail, facsimile or email. If a non-signatory contractor declines to abide by and comply with the terms of a local committee's standards, the apprenticeship committee shall not be required to dispatch apprentices to such contractor. Conversely, if in response to a written request no apprenticeship committee dispatches, or agrees to dispatch during the period of the public works project any apprentice to a contractor who has agreed to employ and train apprentices in accordance with either the apprenticeship committee's standards or these regulations within 72 hours of such request (excluding Saturdays, Sundays and holidays) the contractor shall not be considered in violation of this section as a result of failure to employ apprentices for the remainder of the project, provided that the contractor made the request in enough time to meet the above-stated ratio. If an apprenticeship committee dispatches fewer apprentices than the contractor requested, the contractor shall be considered in compliance if the contractor employs those apprentices

who are dispatched, provided that, where there is more than one apprenticeship committee able and willing to unconditionally dispatch apprentices, the contractor has requested dispatch from all committees providing training in the applicable craft or trade whose geographic area of operation include the site of the public work. Nothing in this section shall affect the right of a contractor who participates in and employs registered apprentices from programs approved under Labor Code Section 3075 outside the geographic area of the public work from employing said apprentice(s) on the site of the public work in order to meet the ratio requirement of Labor Code Section 1777.5.

(b) Apprentices employed on public works shall be paid the applicable apprentice prevailing per diem wage rate, available from DAS, and derived from the Director's survey of wages paid on public works in the geographic area of the craft or trade. DAS shall refer complaints alleging any contractor's failure to pay the proper apprentice prevailing wage rate on a public works project to the Division of Labor Standards Enforcement for investigation and appropriate action.

(c) Apprentices employed on public works can only be assigned to perform work of the craft or trade to which the apprentice is registered. Work of the craft or trade consists of job duties normally assigned to journeymen in the apprenticeable occupation. Where an employer employs apprentices under the rules and regulations of the California Apprenticeship Council, as set forth in Labor Code Section 1777.5(c) (2), apprentices employed on public works must at all times work with or under the direct supervision of journeyman/men. The on-the-job training shall be in accordance with the apprenticeship standards and apprenticeship agreement under which the apprentice is training, provided that a contractor shall not be subject to any financial or administrative obligations to a trust fund or employee benefit plan unless the contractor has so agreed.

(d) The provisions of this regulation shall not apply to contractors on public works projects that were bid prior to July 1, 2009. Such contractors shall comply with the version of this regulation that was in effect prior to July 1, 2009.

Note: Authority cited: Section 1777.7, Labor Code. Reference: Section 1777.5, Labor Code.

June 2009

STATE OF CALIFORNIA
DEPARTMENT OF TOXIC SUBSTANCES
CONTROL
CALRECYCLE PROGRAM
FOR UNIVERSAL WASTE COLLECTION
&
FEDERAL
ENVIRONMENTAL PROTECTION AGENCY (EPA)
REQUIREMENTS



**Hazardous Waste & Universal Waste (U-Waste)
Universal Waste**

Hazardous waste regulations designate a category of hazardous wastes called "universal waste" (u-waste). This category includes many items, including fluorescent lamps, cathode ray tubes, instruments that contain mercury, batteries, and others.

Until recently, some universal wastes could be disposed in the trash under some circumstances, however this is no longer the case—all u-wastes are now banned from the trash.

Under California's Universal Waste Rule (Adobe PDF, 108 KB), households and "conditionally exempt small quantity generators" were allowed to dispose fluorescent lamps, batteries (not lead/acid batteries of the type used in autos), mercury thermostats, and electronic devices to the trash through February 8, 2006, unless the local trash companies or other agencies prohibited it. Large and small quantity handlers are required to ship their waste to either another handler, a universal waste transfer station, a recycling facility, or a disposal facility.

On February 9, 2004, regulations took effect in California that classified all discarded fluorescent lamps as hazardous waste. This includes even low mercury lamps marketed as "TCLP passing" or "TTLC passing." **No one in California is allowed to discard their fluorescent lamps and batteries as nonhazardous solid waste (as ordinary trash).**

Televisions and computer monitors also cannot be disposed to the trash. Most televisions and computer monitors are currently considered hazardous waste when they have lived their life and are ready for recycling or disposal, including cathode ray tube (CRT), liquid crystal diode (LCD), and plasma monitors. These items may not be put in the trash.

For a more information about the details of most universal wastes, contact the California Department of Toxic Substance Control. Also see the DTSC Web page on universal waste. For information about electronic waste specifically, see the California Integrated Waste Management Board's e-waste Web site, Electronic Product Management, or contact ewaste@calrecycle.ca.gov.

More information...
Information on where to take hazardous and u-waste...
Wastes banned from the trash...
Information for local enforcement agencies (LEA)...

Last updated: May 16, 2006
Used Oil & Household Hazardous Waste Program, <http://www.calrecycle.ca.gov/HomeHazWaste/>
Contact: UsedOilHHW@calrecycle.ca.gov (916) 341-6507

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California Department of Toxic Substances Control

Universal Waste

Universal Waste is a universal problem



Universal wastes are hazardous wastes that are generated by a wide variety of people that contain mercury, lead, cadmium, copper and other substances hazardous to human and environmental health. In general, universal waste may not be discarded in solid waste landfills. Examples of these wastes are batteries, fluorescent tubes, and some electronic devices. The best way to reduce the harmful effects of the wastes on human health and the environment is to reduce consumption. The next best thing is to make sure you DON'T throw them in the trash!

NEW!!!

[Updated Universal Waste Fact Sheet](#)

[Information on the Mercury Thermostat Collection Act of 2008](#)

Types of Universal Wastes and What makes them Hazardous

Batteries--Includes all batteries, AAA, AA, C, D, button cell, 9-volt, and all others, both rechargeable and single use --Cadmium, Copper and (In older batteries) Mercury

Cell Phones-- Antimony , Arsenic, Beryllium, Cadmium, Copper, Lead, Nickel, Zinc

Computers and Computer Monitors-- Arsenic, Cadmium, Lead, PCBs

Electronic Devices --Lead

Fluorescent Lamps --Mercury

[Information on the Mercury Thermostat Collection Act of 2008](#)

[Mercury wastes](#) like thermometers and toys-- Mercury

Non-empty Aerosol Cans -- Propane, Butane, Pesticides

Televisions-- Arsenic, Cadmium, Lead, PCBs

Information for Generators, Handlers, and Recyclers

[Information on proper management of Universal Wastes](#)

[Certified Appliance Recyclers page](#)

[Do you need an EPA ID number?](#)

[File a Notification or Annual Report for UWEDs and CRTs](#)

Where to Take these Wastes?



Join Oscar the Grouch's "Not In My Trash Can-paign" by keeping universal wastes out of the trash.

Find a [Take it Back Partner](#) to properly recycle your fluorescent lights, batteries, and electronic wastes.



CalRecycle's [database](#) has a list of business that collect and recycle all types of universal wastes in California

[eRecycle.org](#) is specially designed for recycling electronic wastes and answering any additional questions

[Earth911.org](#) lists information on all facilities that collect and recycle universal wastes and household hazardous wastes

DTSC's UWED & CRT [database](#) has a list of all collectors and recyclers in California that handle electronic devices.

What about Major Appliances?

Major Appliances contain mercury and other ozone depleting chemicals that are dangerous for human and environmental health. These appliances include the following items.

washing machine

clothes dryer

hot water heater

dehumidifier

conventional oven or microwave oven

stove

refrigerator or freezer

air-conditioner

trash compactor



California Department of Toxic Substances Control

California Identification (ID) Numbers

DTSC issues permanent California ID numbers to generators, transporters and disposal facilities not regulated by the U.S. Environmental Protection Agency (U.S. EPA) for the purpose of tracking hazardous waste. California ID numbers are site-specific and owner-specific. The ID number enables regulators to track the waste from its origin to the final disposal ("cradle to grave"). An ID number identifies each handler of hazardous waste on a hazardous waste manifest and other purposes. Some activities are exempt from having an ID number. The U.S. EPA issues federal ID numbers.

Click on one of the links below to go directly to a specific topic:

[What is an ID Number?](#)
[Who Needs an ID Number?](#)
[Types of ID Numbers](#)
[Generating 5 or More Tons of Hazardous Waste](#)
[Search for an ID Number](#)
[Changing Information on an Existing ID Number](#)
[2011 Verification Questionnaire and Manifest Fees Assessment](#)
[ID Number Verification Questionnaire](#)
[Forms](#)
[Laws, Regulations and Policies](#)
[Contact Information](#)

What is an ID Number?

An ID number identifies each handler of hazardous waste. See DTSC's EPA Identification Numbers fact sheet for general information and answers to the most common questions about ID Numbers.

Who Needs an ID Number?

Most generators, transporters and disposal facilities need an ID number to handle, store and/or treat hazardous waste.

Some businesses that generate and handle universal waste and businesses that generate less than 100kg per month of photographic waste containing silver are exempt from having an ID number.

Types of ID Numbers

California Permanent ID Numbers

Businesses that generate waste on an ongoing basis must have a permanent ID number. To get a permanent ID number, you need to **complete the required application, DTSC Form 1358**. There is no fee to obtain a permanent ID number. Remember, if 5 or more tons of hazardous waste will be generated in a calendar year on your permanent ID number, generator fees may be due. Go to www.boe.ca.gov/pdf/boe400-efa.pdf

California Temporary ID Numbers

Temporary ID numbers (90-day numbers) are issued to people or businesses that do not routinely generate hazardous waste. **Call (800) 618-6942 to get a temporary ID number.** Our hours are Monday through Friday 8:15 to 4:45, closed during the lunch hour. To get a temporary ID number **after hours for a spill, call (800) 852-7550.** There is no fee to obtain a temporary ID number. Remember, if 5 or more tons of hazardous waste will be generated in a calendar year on your temporary ID number, generator fees may be due. Go to www.boe.ca.gov/pdf/boe400-efa.pdf

Federal (RCRA) ID Numbers

Waste regulated by the federal government under the Resource Conservation and Recovery Act is known as "RCRA waste." If a business generates more than 1 kilogram of RCRA acutely hazardous waste per month or more than 100 kilograms of other RCRA waste per month, they must have a federal ID number that is issued by U.S. EPA. Remember, if 5 or more tons of hazardous waste will be generated in a calendar year on your federal ID number, generator fees may be due. Go to www.boe.ca.gov/pdf/boe400-efa.pdf

Generating 5 or More Tons of Hazardous Waste

If you generate 5 or more tons of hazardous waste in a calendar year regardless of the final disposition of the waste on an type of ID number, California permanent or temporary; or federal permanent or temporary, you must contact the Board of Equalization to obtain a generator fee account number. Please contact the Board of Equalization if you have any questions regarding the requirements of registering, at <http://www.boe.ca.gov/pdf/boe400-efa.pdf> or at (916) 323-9555

Search for an ID Number

In DTSC's Hazardous Waste Tracking System (HWTS) you can look up facility and manifest information by searching by ID number, address or business name. Go to www.hwts.dtsc.ca.gov and click on **Reports.**

Changing Information on an Existing ID Number

If you move your business, have a change in ownership or simply change your mailing address, you should notify DTSC of these changes immediately by completing DTSC Form 1358.

2011 Verification Questionnaire and Manifest Fees Assessment

DTSC will mail the 2011 Final Notice Verification Questionnaires (VQ) and Manifest Fees Assessments early November 2011. Dedicated telephone lines and staff will be available after the mailing to answer calls regarding the Verification Questionnaire and Fees Assessment. The phone number is (877) 454-4012 (toll-free when calling from within California) and (916) 255-4439 (local or outside California).

Please note that the telephone lines will be extremely busy for several weeks after the mailing. In order to assist you in completing these forms, DTSC has compiled answers to common questions about the forms. The Frequently Asked Questions about the Verification Questionnaire and Manifest Fees Assessment are located at http://www.dtsc.ca.gov/IDManifest/VQ_FAQ.cfm

ID Number Verification Questionnaire

DTSC sends out a verification questionnaire to businesses holding permanent federal or California ID numbers. Businesses are required to respond with any updates to their business information. Failure to respond to the verification questionnaire will lead to inactivation of the ID number. An ID Number Verification Fee and Manifest Fee assessment is included with the verification questionnaire. Fees are assessed for holders of ID Numbers. Questionnaires are mailed annually. Additional fee information is available in the Hazardous Waste Fee Summary.

[EPA ID Number Verification Questionnaire & EPA ID Number and Manifest Fee Assessment FAQs](#)

[Hazardous Waste Fee Summary](#)

Forms

DTSC Form 1358 is used for updating information on a **California ID number**, applying for a new California ID number, inactivating a California ID number or reactivating a California ID number.

U.S. EPA Form 8700-12 is used for updating information on a **federal ID number** and applying for a new federal ID number. The form includes extensive instructions. Please review before printing the entire form.

Laws, Regulations and Policies

View the California [Health and Safety Code](#) (HSC), Division 20, Chapter 6.5, and the [California Code of Regulations](#) (CCR), Title 22, Division 4.5, Environmental Health.

Sections Relating to ID Numbers:

- (1) Title 22, CCR 66262.12
- (2) Consolidated Transporter Customers: HSC 25160.2
- (3) U.S. EPA Regulations in 40 CFR Sections 261.5 and 262.12
- (4) ID Verification Requirement and Fees: HSC 25205.16
- (5) Manifest Fee: HSC 25205.15

Contact Information

California

DTSC - Generator Information Services Section

Dial (916) 255-1136 if you are calling from outside California.

Dial (800) 618-6942 if you are calling from within California.

Dial (800) 852-7550 for ID number issuance after hours for emergency or spill.

U.S. EPA (Federal)

Region 9 – San Francisco

Dial (415) 495-8895 for a federal ID number.

Dial (415) 947-4400 for ID number issuance after hours for emergency or spill.

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<http://www.epa.gov/region9/waste/epanums.html>



Pacific Southwest, Region 9

Serving: Arizona, California, Hawaii, Nevada, Pacific Islands, Tribal Nations

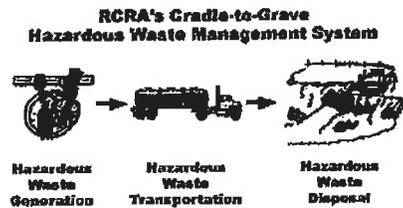
EPA ID Numbers

On this page:

- [How to Obtain An EPA \(Federal\) RCRA ID Number](#)
- [Do You Also Need a California State ID Number?](#)

The Resource Conservation and Recovery Act (RCRA) requires individuals who generate or transport hazardous waste, or who operate a facility for recycling, treating, storing, or disposing (TSD) of hazardous waste, to notify EPA or their authorized State waste management agency of their regulated waste activities and obtain a US EPA Identification (ID) Number (also known as a RCRA ID Number). Handlers of some Universal Waste, Used Oil, and Boilers/Industrial Furnace may require a US EPA ID Number, too. If you are regulated and do not comply with the RCRA notification requirements, you may be subject to civil and criminal penalties.

The Notification of Regulated Waste Activity (EPA Form 8700-12) and associated Instructions are designed to help you determine if you are subject to the requirements under the Resource Conservation and Recovery Act (RCRA) for notifying EPA or an authorized state of your regulated waste activities.



A US EPA ID Number is site-specific (except when issued to a transporter) and permanent (unless issued as a Provisional number, as discussed below). It does not move with the current owner/operator should they relocate unless the owner/operator is a transporter. It is used by EPA to track hazardous wastes from the point of generation to the final disposal site, also known as the "cradle-to-grave" cycle. Once a US EPA ID number is assigned to a specific physical location, it belongs solely to that location and will belong to any owners/operators at that location. "One RCRA EPA ID for One RCRA Subtitle C Site". When a business, located at a site where a US EPA ID number exists, moves to another location (even within the same State or town) the ID number must be inactivated at the former location and a new ID number requested at the new location. A new form is required when relocating or requesting a new US EPA ID number. If at the new location, a RCRA hazardous waste ID number had previously been issued to the former owner/operator, the number for that physical location will then be assigned to the new requester. If a number had never been issued for that physical location, a new number will be issued to the new requester.

Some US EPA ID numbers are not permanent; they are Provisional numbers and temporary in nature. They are issued for emergency or temporary one time clean-ups. Provisional EPA ID numbers are valid for 90 days, then inactivated in the National system.

To determine if your location already has been assigned a US EPA Hazardous Waste ID number, look in [EPA's Envirofacts Warehouse database](#) by the physical location first (be sure to put in the State you want to search within).

Do You Also Need a California State ID Number?

California's Department of Toxic Substances Control issues permanent California ID numbers to generators, transporters and disposal facilities not regulated by the U.S. EPA for the purpose of tracking hazardous waste. These ID Numbers are issued under California State authority.

For complete information, please visit DTSC's [Managing Waste Web site](#). [EXIT Disclaimer](#)

CA Department of Toxic Substances Control
 (800) 618-6942 (In California)
 (916) 255-1136 (Out of State)

How to Obtain An EPA (Federal) RCRA ID Number

Federal RCRA ID Numbers (EPA IDs) are issued directly by Region 9 states. For assistance in determining if you handle a federally regulated hazardous waste, help in obtaining an EPA ID, or to update information for an existing ID, please contact the appropriate agency listed below for the state in which your facility is located.

For locations in Arizona, contact:
 Arizona Department of Environmental Quality (ADEQ)
 Hazardous Waste Section
 1110 Washington St, 4415A-1
 Phoenix, AZ 85007
 (602) 771-4232

For locations in California, American Samoa, Guam, Commonwealth of Northern Mariana Islands (CNMI), or on Tribal Lands, contact:
 U.S. EPA Region 9
 RCRA Notifications (handled by contractor, Tetra Tech)
 75 Hawthorne Street, WST-8
 San Francisco, CA 94105
 (415) 465-8895

Do You Also Need a California State ID Number?

For locations in Hawaii, contact:
 Hawaii Department of Health
 Solid and Hazardous Waste Branch
 919 Ala Moana Boulevard, Room 212
 Honolulu, HI 96814
 (808) 588-4228

For locations in Nevada, contact:
 Nevada Division of Environmental Protection (NDEP)
 Bureau of Waste Management
 901 S. Stewart Street, Suite 4001
 Carson City, NV 89701
 (775) 687-8464

For emergency spills, only when state offices are closed, please call the following number for all Region 9 states. The Duty Officer will route your call appropriately depending on your location.
 (800) 300-2193

[Region 9 Emergency Response](#)

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Grants & Funding
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Media Center
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Fact Sheet, November 2007

EPA Identification Numbers for Generators

Regulatory Assistance Officer's Notes:

The Department of Toxic Substances Control (DTSC) Regulatory Assistance Office prepared this fact sheet to provide general information about EPA Identification Numbers. Throughout the online version of this fact sheet, numbers in blue ([66262.12](#)) represent citations from the California Code of Regulations or the California Health and Safety Code. Clicking on the blue numbers will take you to sites containing the regulations. If you generate hazardous waste, you should consult with your Certified Unified Program Agency (CUPA). Finally, DTSC strongly encourages all businesses that generate hazardous waste to consider waste minimization, source reduction, and pollution prevention.

What is an EPA ID Number?

This number, issued either by the U. S. Environmental Protection Agency (U.S. EPA ID Number), or by DTSC (California ID Number), identifies each handler of hazardous waste on hazardous waste manifests and other paperwork. The ID Number enables regulators to track the waste from its origin to final disposal ("cradle to grave.") With the exceptions discussed later in this guidance, most hazardous waste generators must have an ID Number before a registered hazardous waste transporter will accept the waste for shipment. All hazardous waste transporters and permitted treatment, storage and disposal facilities must have ID numbers.

Are State and Federal laws the same?

The federal hazardous waste law (the Resource Conservation and Recovery Act, or "RCRA") allows states to enact their own hazardous waste laws, which must be at least as stringent as the federal laws. The requirements under California law are more stringent than the federal criteria. Wastes that pass the federal hazardous waste criteria but fail the California criteria are called "non-RCRA" or "California-only" hazardous wastes. Wastes containing corrosive solids, asbestos, nickel or zinc are examples of common California-only hazardous wastes. Other states may not consider California-only wastes hazardous. Federal law also exempts generators of small quantities of waste from many federal waste management requirements.



How many ID Numbers do I need?

ID Numbers are site-specific and there is normally only one number at a business address. If you have a business that generates waste at multiple addresses that are not physically connected (contiguous), each address needs a separate ID Number. In the case where generators are independent businesses that operate in suites within the same building, each business must have their own ID Number. If you are not clear as to whether you operate on one site or multiple sites, contact your local environmental agency or the DTSC information resources listed at the end of this fact sheet.

Do I need a U.S. EPA ID Number, or a California ID Number?

If you generate more than 1 kilogram of RCRA acutely hazardous waste per month or more than 100 kilograms of other RCRA waste per month, you must get a U.S. EPA ID Number. If you generate 100 kilograms or less of RCRA waste or one kilogram or less per month of acutely hazardous waste, and meet certain other requirements, you are exempted by U.S. EPA from many of its regulations, including the requirement to have an EPA ID Number. These businesses are called "conditionally exempt small-quantity generators", or CESQGs. The regulatory citation is 40 CFR section 261.5

However, California regulations do not have an equivalent small quantity generator exemption. Almost all business generators of hazardous waste in California that are not required to have a U.S. EPA ID Number must, in practice, have a California ID Number. See California Code of Regulations title 22, section 66262.12. However:

1. Generators handling only hazardous waste produced incidental to owning and maintaining their own place of residence do not need an ID Number, either federal or state.

2. Businesses whose ONLY hazardous waste generation is 100 kilograms or less per month of waste that is hazardous solely because of its silver content ("silver-only waste") do not need an ID Number. This is true even if they treat the waste in silver-recovery units and then send the silver for reclamation. See Health and Safety Code section 25143.13. Also see the DTSC Fact Sheet, "Onsite Tiered Permitting: Changes in Regulation of Silver Wastes."

3. Businesses that generate and manage less than 11,000 lbs (about 5 tons) of universal waste on-site at any one time may need to get a Federal EPA number. For information about obtaining a Federal EPA number, call (415) 495-8895. For information about Universal Waste, see DTSC's "Managing Universal Waste in California."

In summary, except for the above-mentioned exemptions, if you generate only non-RCRA hazardous wastes, or you generate less than 100 kilograms of RCRA hazardous waste per month (or less than 1 kilogram of RCRA acutely hazardous waste), you must get a California ID Number. If you generate more than 100 kilograms of RCRA waste per month or more than 1 kilogram of RCRA acutely hazardous waste per month, then you must get a U.S. EPA ID Number.

I used to be exempt from ID Number requirements. What happened?

The passage of Senate Bill 271 (effective January 1, 2002) removed the exemption that once allowed small generators of used oil and solvents to offer waste for transport without an EPA ID Number (former milkrun or modified manifest procedures.)

The Consolidated Manifesting procedure that replaced the milkrun manifesting procedure requires that generators using consolidated transporters provide them with an ID Number.

How do I get an EPA ID Number?

Handlers of RCRA waste who need an U.S. EPA ID Number must send a "Notification of Regulated Waste Activity", form 8700-12, to the U.S. EPA contractor at the address given in its instructions. You can request this form by calling (415) 495-8895, or you can download the form from the [U.S. EPA](#) web site.

Handlers who do not need a U.S. EPA ID but do need a California ID Number can obtain it by completing and submitting the "California Hazardous Waste Permanent ID Number Application", [DTSC Form 1358](#), by mail, email, or fax. You can download the form from the [DTSC website](#) or you can request a blank form by calling DTSC at 800-618-6942. DTSC no longer issues permanent ID Numbers by telephone.

Am I charged fees for the issuance of the ID Number?

There is no charge for issuing the number, but DTSC is required to collect an annual business information verification fee for each permanent ID Number. The fee is based on the number of employees in the entire organization. If your business has fewer than 50 employees, the fee is zero. There is no verification fee for a Temporary ID Number. [Frequently Asked Questions](#) about the ID Number verification process and manifest fees are available on the DTSC website.

I usually don't generate hazardous waste, but I recently generated some. Can I get a temporary EPA ID Number for this one time event?

DTSC issues temporary (or "provisional") ID Numbers to people or businesses that do not routinely generate hazardous waste. Examples of non-routine activities include asbestos abate-

ment, removing underground tanks, and removing hazardous wastes that were abandoned in a leased building. A California temporary number is only valid for non-RCRA (California only) waste or when the total RCRA waste hauled is less than 220 pounds or 27 gallons per month. To get a California temporary ID Number, call DTSC at (800) 618-6942 (in-state) or (916) 255-1136 (out-of-state.) U.S. EPA also issues provisional ID Numbers for non-routinely generated federal wastes. Temporary and provisional ID Numbers are valid for a maximum of 90 days but can be used to haul any amount of hazardous waste that has been generated at the site before and during that period. Holders of temporary Numbers are not charged EPA ID verification fees.

Do I need to get a new ID Number if I move my business?

Yes. If you have a California ID Number, submit one DTSC Form 1358 to deactivate your old number, and another to request that a number be issued for your new location. This is also true if you are selling or buying a business; the seller must inactivate the old number and have the new owner submit a [DTSC Form 1358](#) to have a new number issued. If you have a U.S. EPA ID Number, these actions are done through the use of Form 8700-12, "Notification of Regulated Waste Activity".

I've always wondered: do the letters in front of the ID Numbers mean anything?

Early federally-issued ID Numbers had two letters corresponding to the generator's state and ten digits. Current ID Numbers consist of three letters followed by nine digits. The significance of those letters is as follows:

EPA ID Numbers

- CAR Federal permanent number currently being issued.
- CA Federal permanent number that preceded the CAR prefix. ID numbers with a CA prefix are still valid, but have not been issued since February 1995.
- CAD Federal permanent number that preceded the CA prefix, or a State permanent or provisional number issued before 1988. ID numbers with a CAD prefix have not been issued since August 1993.
- CAT Federal permanent number that preceded the CAD prefix.
- CAP Federal provisional or emergency number currently issued.

California ID Numbers

- CAL State permanent number.
- CAC State provisional or emergency number.
- CAH State provisional or permanent number issued for Household Hazardous Waste Collections.
- CAI State permanent number issued for Exotic Pest Detection.
- CAB State provisional number issued for removal of hazardous waste caused by a natural disaster.
- CAF State permanent number issued for farm used oil.
- CAS State permanent number issued for Emergency Response.
- CLU Clandestine Drug Lab cleanup.
- CAX State permanent or provisional number issued before 1987. A CAX number is no longer a valid ID number.
- CA99 State permanent number issued to cruise ships.

DTSC Regulatory Assistance Officers provide informal guidance regarding management of hazardous waste for the convenience of the public. Such advice is not binding upon DTSC, nor does it have the force of law. If you would like a formal opinion on a matter by DTSC, please contact the responsible program office directly.

You should also refer to the statutes and regulations, DTSC Policies and Procedures, and other formal documents.

If you cannot find the answer to your question in this fact sheet, contact your local DTSC Regulatory Assistance Officer directly. You can reach them toll-free at 800-728-6942, or contact them through email at RAO@dtsc.ca.gov.

CONTRACT AGREEMENT

AGREEMENT

CITY OF SAN BERNARDINO

THIS AGREEMENT is made and concluded this _____ day of _____, 20____, between the City of San Bernardino (owner and hereinafter "CITY"), and _____ (hereinafter "CONTRACTOR").

1. For and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the CITY, and under the conditions expressed in the bond as deposited with the CITY, receipt of which is hereby acknowledged, the CONTRACTOR agrees with the CITY, at the CONTRACTOR's own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Bid Documents, the Special Provisions and Conditions and Provisions for Community Development Block Grant federally-funded projects, in good workmanlike and substantial manner the

ROOF REPLACEMENT AT NORMAN F. FELDHEYM CENTRAL LIBRARY IN THE CITY OF SAN BERNARDINO (INCLUDES COMMUNITY DEVELOPMENT BLOCK GRANT FUNDS)

in strict conformity with Plans and Special Provisions No. 13069, and also in accordance with Standard Specifications for Public Works/Construction, latest edition in effect on the first day of the advertised "Notice Inviting Sealed Bids" for this project, on file in the Office of the City Engineer, Public Works Department, City of San Bernardino, which said Plans and Special Provisions and Standard Specifications are hereby especially referred to and by such reference made a part hereof.

2. Contractor agrees to receive and accept the prices as set forth in the bid schedule as full compensation for furnishing all materials and doing all the work contemplated and embraced in this agreement; also for all loss or damage arising out of the nature of the work aforesaid or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work and for all risks of every description connected with the work; also for all expenses incurred by or in consequence of the suspension or discontinuance of work, and for well and faithfully completing the work and the whole thereof, in the manner and according to the Plans and Special Provisions, and requirements of the Engineer under them.

3. The Contractor herein covenants by and for himself or herself, his or her heirs, executors, administrators, and assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, national origin, or ancestry in the performance of this contract, nor shall the Contractor or any person claiming under or through him or her, establish or permit any such practice or practices of discrimination or segregation with reference to the selection of subcontractors, vendees, or employees in the performance of this contract.

**AGREEMENT: ROOF REPLACEMENT AT
NORMAN F. FELDHEYM CENTRAL LIBRARY
IN THE CITY OF SAN BERNARDINO**

4. City hereby promises and agrees with the said Contractor to employ, and does hereby employ the said Contractor to provide the materials and to do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner, and upon the conditions above set forth; and the same parties for themselves, their heirs, executors, administrators, and assigns, do hereby agree to the full performance of the covenants herein contained.

5. It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and the bid of said Contractor, then this instrument shall control and nothing herein shall be considered as an acceptance of said terms of said bid conflicting herewith.

IN WITNESS WHEREOF, the parties of these present have hereunto set their hands the year and date first above written.

CONTRACTOR

CITY OF SAN BERNARDINO

NAME OF FIRM:

BY: _____
MARK SCOTT, City Manager
City of San Bernardino

BY: _____

TITLE: _____

ATTEST:

MAILING ADDRESS:

GEORGEANN HANNA, City Clerk

PHONE NO.:() _____

APPROVED AS TO FORM:

GARY D. SAENZ, City Attorney

NOTE: Secretary of the Owner should attest.
If Contractor is a corporation, Secretary should attest.