



**LEAHI HOSPITAL**  
**HAWAII HEALTH SYSTEMS CORPORATION**

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3675 Kilauea Avenue ■ Honolulu, Hawaii 96816 ■ Telephone: (808) 733-8000

March 30, 2026

TO: Interested Bidders

FROM: Michael Nakada  
HHSC Oahu Region

SUBJECT: Addendum No. 1  
IFB No. 26L-0311 Leahi Hospital Sinclair Building Heat Pump Sound Attenuation

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Addendum No. 1 provides changes to the subject solicitation.

1. See attached.

End of Addendum No. 1

# ADDENDUM NO. 1

## TO CONSTRUCT

**LEAHI SINCLAIR BUILDING HEAT PUMP, BASEMENT FLOOR  
TAX MAP KEY: 3-2-031:001  
3675 KILAUEA AVE  
HONOLULU, OAHU, HAWAI'I, 96816**

DATE: MARCH 27, 2026

This addendum modifies the original Solicitation Documents for the Project issued on February 27, 2026 and any previously issued addenda. The items in this addendum shall govern the work, taking precedence over previously issued specifications and drawings governing the items mentioned.

### A. REVISED DRAWINGS:

1. Sheets 001 and M-101 to E-601: Updated the sheet border to include stamps and signatures, as well as updated date and correct sheet number count.
2. Sheet 001: Updated Index of Drawings to include added sheets: M-601 "Mechanical Schedules and Schematic" and E-601 Electrical One-Line Diagram.
3. Sheet M-001:
  - Updated General Notes to include "CONTRACTOR SHALL COORDINATE WITH LEAHI TO MINIMIZE DURATION OF HOT WATER OUTAGES."
  - Also removed note: "PROVIDE BALANCING DAMPERS AT ALL BRANCHED DUCTWORK."
  - Removed section "2.5: DUCT SILENCER" from the Mechanical Technical Specifications.
  - Added stamp and signature to energy box.
4. Sheet MD-101:
  - Added additional location of POR on hot water, hot water return, and condensation pipes.
  - Changed POC to POR for existing evaporator discharge ductwork.
5. Sheet M-101:
  - Added updated location of POC on hot water and hot water return. A new route and POC was added for the condensation pipes.
  - Also added a note on left wall "SEE ARCHITECTURAL PLANS FOR WALL".
  - The duct silencer on the main duct was removed.
  - The main ductwork route was updated so the end of the duct centers up with the existing opening.
  - RAG label was changed to OAG.

- Sheet keynotes block has the following changes: Removed Note 2: “PROVIDE NEW DUCT SILENCER.”, changed Note 3 to say “PROVIDE NEW HEAT PUMP AND ASSOCIATED PIPING WIRING AND CONTROLS. EXPAND THE EXISTING HOUSEKEEPING PAD AS NECESSARY. RECONNECT TO EXISTING HOT WATER AND HOT WATER RETURN AND CONDENSATE PIPING.”, and added new Note 5 to say “CENTER DUCT TO EXISTING OPENING.”
6. Sheet M-501: The entire sheet was updated to only include Mechanical Details. Two new mechanical details were added: “Condensate Trap Detail” and “Equipment Pad Expansion Detail”. Both mechanical schedules, as well as the “Typical Hot Water System Schematic Diagram” and “Typical Water Heating System Control Diagram” were removed.
7. Sheet M-601: This is a newly added sheet that includes: The Air Source Heat Pump Schedule, the “Typical Hot Water System Schematic Diagram”, and the “Typical Water Heating System Control Diagram”.
- There is no longer a duct silencer schedule because the silencer was removed.
  - In the Air Source Heat Pump Schedule, the “Avg-A-weighted sound pressure at 14 ft radius from unit (dBA)” value changed from 64.37 to 65. In the remarks section, the remark was changed to say “PROVIDE WITH SINGLE CENTRIFUGAL SIDE DISCHARGE BLOWER, INTEGRAL WATER PUMP, UNIT MOUNTED CONTROLS INCLUDING HIGH AND LOW PRESSURE SAFETY SWITCHES AND CONTROL PANEL WITH STATUS LIGHTS. PROVIDE COLMAC. PROVIDE SINGLE POINT ELECTRICAL CONNECTION.”
  - In sequence of operations, number 1 was updated to say: “THE NEW HEAT PUMP AND GAS WATER HEATER WILL BE ENERGIZED 24 HOURS A DAY.”
  - In sequence of operations, number 2 was updated to say: “WHEN THE NEW TEMPERATURE SENSOR IN THE PRIMARY TANK REGISTERS A TEMPERATURE BELOW 135 F, THE NEW HEAT PUMP COMPRESSOR, BLOWER AND CIRCULATING PUMP WILL ACTIVATE TO HEAT THE WATER IN THE STORAGE TANKS. WHEN THE TEMPERATURE SENSOR IN THE PRIMARY TANK REGISTERS A TEMPERATURE OF 140 F THE HEAT PUMP COMPRESSOR, BLOWER AND CIRCULATING PUMP WILL DEACTIVATE.”
8. Sheet E-001:
- Stamp and signature have been added to the energy code box.
  - Enclosed circuit breaker and fused disconnect switch have been added to the electrical symbol list.
9. Sheet E-101:
- Location of existing main distribution panel and enclosed circuit breaker that powers the existing heat pump has been added.
  - Routing for conduit has been added.
  - Note has been added for work to be done on the enclosed circuit breaker.

10. Sheet E-102:
  - Note has been revised for changes in work to remove the existing fused disconnect switch and work for the new disconnect switch.
  - Load calculations have been removed and added to E-601.
  
11. Sheet E-102 View 1:
  - Heat pump electrical information has been updated.
  - Existing fused disconnect switch has been removed due to replacing the enclosed circuit breaker at the power source.
  - Note numbering calling out the disconnect switch has changed.
  
12. Sheet E-601
  - One-line diagram has been added for clarity of work done.
  - Load calculations have been moved to this sheet.

**B. REVISED SPECIFICATIONS:**

1. Changed date on cover page and "Final Submittal" changed to "Bid Set Submittal"
2. Changed the footer notes to correct date on all pages.

**Leahi Hospital, Sinclair Building  
Heat Pump Sound Attenuation  
Honolulu, Hawaii  
TMK No. 3-2-031:001**

PREPARED FOR:  
Hawaii Health Systems Corporation  
Leahi Hospital  
3675 Kilauea Ave  
Honolulu, HI 96816

**TECHNICAL SPECIFICATIONS**

BID SET SUBMITTAL <sup>1</sup>

March 2026 <sup>1</sup>

Prepared By:



1001 Bishop Street, Suite 2500 • Honolulu, Hawaii 96813  
Tel: 808 521-3773

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See contract drawings.

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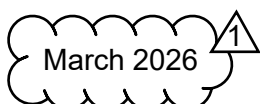
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See contract drawings.

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See contract drawings.



**DIVISION 16 - ELECTRICAL**

See contract drawings.

## **DIVISION 0 - INTRODUCTORY, BIDDING AND CONTRACTING REQUIREMENTS**

### **SECTION 00210 - INSTRUCTIONS TO BIDDERS**

#### **PART 1 - GENERAL**

##### 1.01 GENERAL:

- A. Only Bidders with the required contractor's license(s) are eligible to submit a Bid.
- B. Bidders (Contractors) shall be incorporated or organized under the laws of the State or be registered to do business in the State as a separate branch or division that is capable of fully performing under the contract. The following definitions are used in the solicitation documents.
  - 1. Hawaii Business §3-1222-112 HAR: A bidder who is registered and incorporated or organized under the laws of the State is a "Hawaii Business" and eligible for an award.
  - 2. Compliant non-Hawaii Business §3-122-112 HAR: A bidder not incorporated or organized under the laws of the State, but is registered to do business in the State and complies with or is exempt from the requirements of §3-122-112 HAR, is a "Compliant Non-Hawaii Business" and eligible for an award.
  - 3. Non-compliant Bidder: If a bidder is a non-Hawaii business and is not registered with the DCCA Business Registration Division (BREG) or cannot comply with §3-122-112 HAR, then the bidder is non-compliant and is ineligible for an award.
- C. Prospective Bidders shall submit their "Intention to Bid".
- D. Bidders shall submit the "Sealed Bid Form", bid bond (if required), tax clearances, Hawaii business certificates, and any other documents required by the bidding documents.
- E. The GENERAL CONDITIONS set forth additional terms and conditions for the bid and award process. The GENERAL CONDITIONS will be part of the contract documents by which HHSC and the bidder (prospective contractor) will be bound. Bidders are directed to the GENERAL CONDITIONS for contract and statutory requirements and for Bidding and Execution of the Contract Requirements. Bidders are also directed to "Section 00800 - Special Provisions" of these specifications for definitions and modifications to the GENERAL CONDITIONS.

##### 1.02 OFFEROR(S) or BIDDER(S):

- A. The terms "Offeror" and "Bidder" are synonymous when used in this "Section 00210" and other solicitation documents.

1.03 ADDENDA, CLARIFICATIONS:

- A. Addenda: The HHSC may periodically issue an addendum that may increase or decrease the scope of work or contract time, provisions or conditions. The HHSC will make the addenda available online on the facility website. Bidders are responsible for the information contained in the addenda or bid clarification whether or not the Bidder receives the addenda or clarification.
- B. Bidders discovering an ambiguity, inconsistency or error when examining the bidding documents or the site and local conditions or bidders with questions or clarification requests shall send their written requests (email or fax notification are acceptable) to the Contract Manager. Bidders shall comply with the following procedures:
  - 1. Identify each request with the Project Name and HHSC Project Number.
  - 2. Indicate the appropriate section number, paragraph, drawing and detail number, schedule or other identifier.
  - 3. The request should be brief, concise, but complete enough to properly evaluate and determine the merits or non-merits of the question or request.
- C. Bidders shall make any requests for clarifications no later than fourteen (14) calendar days prior to the submission date for sealed bids. Refer to the "Notice to Bidders" for submission date.
- D. HHSC will respond to important requests or clarifications by way of addenda. HHSC may not address or respond to all bidders inquiries, if the HHSC determines the request is unimportant or not required to disseminate to all Bidders.

1.04 SEALED BID FORM (BID FORM):

- A. Bidder shall fill out the "Sealed Bid Form" completely. Write in ink or type. Besides the following paragraphs with instructions, there are supplemental Bidder's Instructions within the text of the "Sealed Bid Form" and bidders shall comply with the instructions. Do not alter the "Sealed Bid Form", and maintain the form intact.
- B. RECYCLED PRODUCT PREFERENCE is not applicable to this project.
- C. OTHER CONDITIONS: Bidder acknowledges and agrees to the provisions and certifications stated in this article.
- D. RECEIPT OF ADDENDA: Bidder shall fill in the appropriate dates any addenda were received.

- E. LISTING JOINT CONTRACTORS OR SUBCONTRACTORS:
1. Bidder shall complete the “Joint Contractors or Subcontractors List.” It is the sole responsibility of the bidder to review the requirements of this project and determine the appropriate specialty contractor’s licenses that are required to complete the project. Failure of the bidder to provide the correct names, license numbers, specialty class number, classification description and to indicate that the specialty contractor is required for this project, may cause the bid to be rejected.
  2. Bidder agrees the completed listing of joint contractors or subcontractors is required for the project and that the bidder, together with the listed joint contractors and subcontractors, have all the specialty contractor’s licenses to complete the work.
  3. Based on the Hawaii Supreme Court’s January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Hawaii 450 (2002), the bidder as a general contractor (‘A’ or ‘B’ license) is prohibited from undertaking any work solely or as part of a larger project, which would require the bidder (‘A’ or ‘B’ general contractor) to act as a specialty (‘C’ license) contractor in any area in which the bidder (‘A’ or ‘B’ general contractor) has no specialty contractor’s license. Although the ‘A’ and ‘B’ contractor may still bid on and act as the “Prime Contractor” on an ‘A’ or ‘B’ project (See, *HRS §444-7 for the definitions of an “A” and “B” project*), respectively, the ‘A’ and ‘B’ contractor may only perform work in the areas in which they have the appropriate contractor’s license. The bidder (‘A’ or ‘B’ general contractor) must have the appropriate ‘C’ specialty contractor’s licenses either obtained on its own, or obtained automatically under HAR §16-77-32.
  4. General Engineering ‘A’ Contractors automatically have these ‘C’ specialty contractor’s licenses: C-3, C-9, C-10, C-17, C-24, C-31a, C-32, C-35, C-37a, C-37b, C-38, C-43, C-56, C-57a, C-57b, and C-61.
  5. General Building ‘B’ Contractors automatically have these ‘C’ specialty contractor’s licenses: C-5, C-6, C-10, C-12, C-24, C-25, C-31a, C-42a, and C-42b.
  6. The table that lists the specialty contractor’ classifications in the bid form is from the Department of Commerce and Consumer Affairs’ (DCCA) website [www.state.hi.us/dcca/har/index.html](http://www.state.hi.us/dcca/har/index.html). Bidders shall provide the appropriate classifications numbers and descriptions for any specialty contractors that are not included in the bid form and bidders are directed to the DCCA web site for the latest updated list.
  7. Instructions to complete the Joint Contractors or Subcontractors List:
    - a. Determine the specialty contractor classification(s) required for this project and provide the complete firm name and license number of the joint contractor or subcontractor in the respective columns. If the bidder is a general contractor and providing the work of the required specialty contractor

classification, fill in the bidder's (general contractor's) license number and name.

- b. List only one joint contractor or subcontractor per required specialty contractor's classification.
  - c. For projects with alternate(s), fill out the respective "Joint Contractors or Subcontractors List for the Alternate(s)." Bidder shall determine the specialty contractor's classification and description required for the respective alternate. Bidders shall fill in the complete class number, class description, firm name and license number of the respective joint contractor or subcontractor. The bidder shall not include any joint contractor or subcontractor previously listed for the base bid.
- F. **COST AND TIME:** Bidder shall completely fill out the article and enter the cost for the Project Bid Price, and Alternates when provided. Bidder shall tabulate the Project Bid Price, and Alternates when provided, and the Bidders shall then enter the Total Lump Sum Bid Price. **BE SURE TO ENTER THE TOTAL LUMP SUM BID PRICE IN WORDS AND NUMERALS.** Refer to Bidder's Instructions located within the article.
1. If provided, bidder shall fill in total costs for each alternate.
  2. The bidder is directed to the construction time information paragraph "B" for the list of contract times and dates which may include: contract duration, project start date, jobsite start date, jobsite completion, contract completion date and construction time for alternates. Bidder shall refer to "Section 01100 - Summary of Work" of these specifications for additional construction time information, as applicable.
- G. **SIGNATORY PAGE:** Bidder shall completely fill out article (page). Bidder shall indicate if it is a "Hawaii Business" or a "Compliant Non-Hawaii Business." Also, bidder shall refer to Bidder's Instructions located within the article.

1.05 **EVALUATION CRITERIA:**

- A. **EVALUTATING BIDS:** The lowest responsive, responsible bid is determined by the following procedures:
1. The total lump sum bid price is adjusted to reflect the applicable preferences.
    - a. For projects with alternates, the total lump sum base bid price and alternates will be adjusted to reflect the applicable preferences.
  2. Project control budget is established prior to the submission of bids.

1.06 **METHOD OF AWARD:**

- A. The contract will be awarded to the lowest responsive and responsible Bidder whose bid (including any alternates which may be selected) meets the requirements and criteria set forth in the solicitation documents.

- B. In the event the total lump sum bid of all bidders exceeds the project control budget, HHSC reserves the right to make an award to the apparent Low Bidder if additional funds are available or by reducing the scope of work through negotiation.

1.07 OTHER CONDITIONS FOR AWARD:

- A. The Chief Procurement Officer may reject any or all bids and waive any defects if the Chief Procurement Officer believes the rejection or waiver is in the best interest of HHSC.
- B. The Chief Procurement Officer may hold all bids up to 60 calendar days from the date bids were opened. Unless otherwise required by law, bids may not be withdrawn without penalty.
- C. The award of the contract is conditioned upon funds made available for the project (or projects if applicable)

1.08 COMPLIANCE WITH §3-122-112 HAR:

- A. As a condition for award of the contract and as proof of compliance with the requirements of 103D-310(c) HRS, the bidder shall meet the “Hawaii Business” or “Compliant non-Hawaii Business” requirements and shall provide the following documents:
  - 1. Department of Taxation (DOTAX) and the IRS tax clearance certificates.
  - 2. Department of Labor (DLIR) certificate of compliance.
  - 3. Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) certificate of good standing.
    - a. A Hawaii business that is a sole proprietorship is not required to register with the BREG and therefore not required to submit the DCCA, BREG “Certificate of Good Standing.”
- B. The apparent three low bidders shall furnish the required documents to HHSC within seven calendar days from the bid opening date. If a valid certificate is not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. Bidder is responsible to apply for and submit the documents by the required deadlines.

**PART 2 - PRODUCTS (Not Used)**

### PART 3 - EXECUTION

#### 3.01 REQUIRED DOCUMENTATION FOR HAWAII BUSINESS OR COMPLIANT NON-HAWAII BUSINESS (§3-122-112 HAR):

- A. TAX CLEARANCE REQUIREMENTS (HRS Chapter 237): Bidder shall obtain a tax clearance certificate from the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS). The certificate is ~~are~~ valid for six months from the most recently approved stamp date on the certificate; the certificate must be valid on the date received by HHSC.
1. DOTAX *TAX CLEARANCE APPLICATION* Form A-6 (Rev 2003) is available at DOTAX and IRS (State of Hawaii) offices or DOTAX website, and by mail or fax.
    - a. DOTAX website: <http://www.state.hi.us/tax/alphalist.html#a>
    - b. DOTAX forms by fax/mail: (808) 587-7572 or 1-800-222-7572
  2. Mail, fax or submit in person completed tax clearance application forms to the Department of Taxation, Taxpayer Services Branch or to the address listed on the application. Facsimile numbers are:
    - a. DOTAX: (808) 587-1488
    - b. IRS: (808) 539-1573
  3. DOTAX will return the form to the bidder. The bidder is reminded that it is responsible to submit the applications for the tax clearance directly to DOTAX or IRS and not to HHSC.
- B. DLIR CERTIFICATE of COMPLIANCE (HRS Chapter 383 - Unemployment Insurance, Chapter 386 - Workers' Compensation, Chapter 392 - Temporary Disability Insurance, and 393 – Prepaid Health Care): Bidder shall obtain a certificate of compliance from the Hawaii State Department of Labor and Industrial Relations (DLIR). The certificate is valid for six months from the date of issue; certificates must be valid on the date received by HHSC.
1. DLIR *APPLICATION FOR CERTIFICATE OF COMPLIANCE WITH SECTION 3-122-112 HAR*, Form LIR#27 is available at DLIR website or at the neighbor island DLIR District Office.
    - a. DLIR website: <http://www.dlir.state.hi.us/LIR#27>
  2. Mail, fax or submit in person completed application form to the Department of Labor and Industrial Relations, Administrative Services Office at the address listed on the application.
  3. DLIR will return the form to the bidder. The bidder is reminded that it is responsible to submit the application for the certificate directly to DLIR and not to HHSC.
- C. DCCA CERTIFICATE OF GOOD STANDING: Bidder shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG). The certificate of good standing is valid for six months from the date of issue; certificates must be valid on the date received by HHSC.

1. DCCA *CERTIFICATE OF GOOD STANDING* is available from the business registrations website or by telephone. Bidders are advised there are costs associated with registering and obtaining the certificate.
  - a. DCCA form website: <http://www.BusinessRegistrations.com>
  - b. DCCA telephone: (808) 586-2727, M - F 7:45 to 4:30 HST
2. Submit the application per DCCA's requirements.
3. DCCA will return the form to the bidder. The bidder is reminded that it is responsible to submit the application for the certificate directly to DCCA and not to HHSC.

END OF SECTION

## SECTION 00800 - SPECIAL PROVISIONS

### PART 1 - GENERAL

#### 1.01 SUBSTITUTION REQUESTS:

- A. Written substitution requests must be submitted with your Invitation for Bid (IFB) in accordance with IFG Section 3. All substitutions will be reviewed and approved in accordance with the GTC.
- B. Substitution requests by FAX are not acceptable.

#### 1.02 PROJECT CONTACT PERSON:

- A. HHSC Representative – For access to the site.

NAME: Mr. Ron Kurasaki  
POSITION OR TITLE: Project Manager  
TELEPHONE NUMBER: (808) 497-9350  
Email: rkurasaki@hhsc.org

- B. Project Coordinator - For questions and clarifications during bidding and Requests for Substitutions.

NAME: Mr. Joel Yuen  
POSITION OR TITLE: Project Engineer  
TELEPHONE NUMBER: (808) 521-3773  
Email: jyuen@insynergyeng.com

- C. Procurement Agency – For questions regarding proposal and contract requirements.

NAME: Mr. Scott Kawai  
POSITION OR TITLE: Contracts Manager  
TELEPHONE NUMBER: (808) 832-3025  
Email: SKawai@hhsc.org

#### 1.03 OFFEROR'S RESPONSIBILITY FOR EXAMINING PLANS, SPECIFICATIONS AND SITE OF WORK:

- A. Offerors herewith refers to sub-contractors, suppliers, manufacturer's representatives as well as contractors.

#### 1.04 LIQUIDATED DAMAGES:

- A. The time of completion for the Work shall be within 220 consecutive calendar days from the official commencement date of the Notice to Proceed (NTP).
- B. In accordance with the General Conditions, upon failure to complete Work or any portion of the Work within the time or times fixed in the contract or

extension thereof, the Contractor shall pay liquidated damages to the Department in the amount of \$500.00 per calendar day of delay.

- C. In accordance with the General Conditions, PROJECT ACCEPTANCE DATE, for failure to correct punch list deficiencies, within the time or times fixed in the contract or extension thereof, the Contractor shall pay liquidated damages to the HHSC, in the amount equal to ten percent (10%) of the liquidated damages per calendar day of delay.
- D. In accordance with the General Conditions FINAL SETTLEMENT OF THE CONTRACT, for failure to submit closing documents within the time or times fixed in the contract or extension thereof, it is agreed that the Bidder shall pay liquidated damages to HHSC in the amount equal to five percent (5%) of the liquidated damages per calendar day of delay.

1.05 SPECIALTY CONTRACTOR'S LICENSE:

- A. Contractor shall be solely responsible to assure that all the specialty licenses required to perform the Work are covered by the Contractor or its subcontractor(s).

1.06 WORKING HOURS:

- A. The regular working hours for this project is from 8:00 AM to 4:30 PM Monday through Friday, excluding State Holidays, unless otherwise noted or restricted under "Section 01100 - Summary of Work". The Working Hours provisions of specification "Section 01100 - Summary of Work" shall govern over this article 1.06.
- B. The Contractor may be given approval to work beyond the regular hours including Saturdays, Sundays, State Holidays, night work, or after hours under the provisions of the GENERAL CONDITIONS, "Overtime And Night Work Section" and under specification "Section 01100 - Summary of Work".

1.06 SPECIAL PROCEDURES DURING BIDDING

- A. Bid documents will be available online and from the Contracts Manager's office, at Leahi, 3675 Kilauea Ave, Honolulu HI 96816.
- B. All bids shall be submitted to the Contracts Manager.
- C. All questions regarding the plans and specifications shall be submitted, in writing, to the Engineer. The Engineer will review the questions and issue any responses via Addendum. Only information received by Addendum shall be binding.
- D. All questions regarding the proposal or contractual requirements shall be submitted, in writing to the Contracts Manager. The Contracts Manager will review the questions and issue any responses via Addendum. Only information received by Addendum shall be binding.

- E. Any visitation to the site to examine the scope of work shall be requested through the HHSC Representative. Disruption of facility operations shall not be permitted.

#### 1.07 PROCEDURES DURING CONSTRUCTION

- A. Upon issuance of the Notice to Proceed, the Contractor shall submit a work schedule for review and discussion. The work schedule shall be updated on a weekly or bi-weekly basis as directed by the Architect.
- B. On a weekly or bi-weekly basis, the Contractor shall conduct a progress meeting with Leahi and Engineer. The meeting will discuss the progress of the construction, discussion of problems, and review of outstanding issues. The Contractor shall conduct the meeting and prepare the meeting notes and minutes and distribute to all parties.
- C. During the construction, submittals and RFIs shall be submitted to the Engineer for review and action. To expedite the review, the Contractor may make submittals via email.
- D. Periodic requests for payment shall be submitted to the Engineer for review and confirmation. Approved requests for payment will be forwarded to the Contracts Officer for processing of payment.
- E. Upon substantial completion of the project, the Contractor shall submit in writing to the Architect a request for a pre-final inspection. The Contractor shall have completed their own inspection and completed all noted discrepancies. Include with the request for the pre-final inspection a list of all outstanding work not completed or corrected.
- F. Upon conducting a pre-final inspection, the Engineer shall prepare a punchlist of noted discrepancies for the Contractor's remedial action. A final inspection will be performed upon completion of all punchlist items.

#### 1.08 PROJECT RESTRICTIONS:

- A. The Contractor is informed that the facilities will be fully occupied and work shall be performed in close coordination with the HHSC representative. Work shall be phased and may be limited to one area at a time. If work will require the relocation of clients from the work area, time shall be allocated for Leahi to conduct this relocation. Scheduling of the work shall be closely monitored and work performed to minimize the disruption to the remaining areas of the facility. All work schedules shall be approved by HHSC prior to starting.
- B. Staging and storage of materials on-site is limited and shall not be allowed unless coordinated and approved with the HHSC representative. Contractor may be required to store materials off-site at his own expense.

- C. Parking on-site is limited and may be restricted to only active delivery of materials and equipment. Coordinate with the HHSC representative. If on-site parking will not be available, the Contractor shall park off-site.
- D. The above restrictions shall be considered in the work of this project and shall be included in the Contractor's cost. No additional compensation shall be made for not considering these restrictions.

## **PART 2 - MATERIALS (Not Used)**

## **PART 3 - EXECUTION**

### 3.01 FINAL PAYMENT REQUIREMENTS:

- A. In addition to the requirements in the GENERAL CONDITIONS "Final Payment" section, the contractor shall submit:
  - 1. Tax clearance certificate from DOTAX and IRS, current within two months of the issuance date; and
  - 2. An originally signed Certificate of Compliance for Final Payment (SPO Form - 22, modified), affirming that the contractor remained in compliance with all laws as required by (§3-122-112 HAR). A contractor making a false affirmation shall be suspended and may be debarred pursuant to section 103D-702 HRS.

END OF SECTION

## **DIVISION 1 - GENERAL REQUIREMENTS**

### **SECTION 01019 - GENERAL PROJECT REQUIREMENTS**

#### **PART 1 - GENERAL**

##### 1.01 SUMMARY OF WORK:

- A. Perform operations and furnish equipment, tools, materials, related items and labor necessary to execute, complete and deliver the Work as required by the Contract Documents.

##### 1.02 DIVISION OF WORK:

- A. The Division and Sections into which these specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to work specified within each section.
- B. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the Work.
- C. Specifications and Drawings are prepared in abbreviated form and include incomplete sentences. Omission of words or phrases such as "the Contractor shall", "as shown on the drawings", "a", "an", and "the" are intentional. Omitted words and phrases shall be provided by inference to form complete sentences.
- D. Specifying of interface and coordination in the various Specification Sections is provided for information and convenience only. Such requirements in the various Sections shall complement the requirements of this Section.

##### 1.03 NOTIFICATION:

- A. Contact the Engineer and HHSC Representative at least five (5) working days prior to starting any onsite work.

##### 1.04 SAFETY REQUIREMENTS:

- A. The Hawaii Occupational Safety and Health Law, Chapter 396, Hawaii Revised Statutes, effective May 16, 1972, as amended, is applicable and made a part of the Contract. Carefully read and strictly comply with its requirements.
- B. Protect the facility personnel, students, and the public whenever power driven equipment is used. Ensure adequate safety precautions are used when operating any power driven equipment.

1.05 PERFORMANCE AND COORDINATION:

- A. Contractor shall be in charge of the Work and the Project Contract Limits, as well as the directing and scheduling of all work. Contractor shall include general supervision, management and control of the Work of this project, and in addition to other areas more specifically noted throughout the Specifications. Final responsibility for performance, interface, and completion of the Work and the Project shall be the Contractor's.
- B. Jobsite Administration shall be the responsibility of the Contractor. Provide a competent superintendent on the job and provide an adequate staff to execute the Work. In addition, all workers shall dress neatly and conduct themselves properly at all times. Loud abusive behavior, sexual harassment and misconduct will not be tolerated. Workers found in violation of the above shall be removed from the job site as directed by the HHSC Technical Representative.
- C. The HHSC and/or Leahi will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the Prime Contractor in matters pertaining to other trades employed on the job.
- D. Coordination: Provide project interface and coordination to properly and accurately bring together the several parts, components, systems, and assemblies as required to complete the Work.
  - 1. Provide interface and coordination of all trades, crafts and subcontracts. Ensure and make correct and accurate connections of abutting, adjoining, overlapping, and related work. Provide anchors, fasteners, accessories, appurtenances, and incidental items needed to complete the Work, fully, and correctly in accordance with the Contract Documents.
  - 2. Provide additional structural components, bracing, blocking, miscellaneous metal, backing, anchors, fasteners, and installation accessories required to properly anchor, fasten, or attach material, equipment, hardware, systems and assemblies to the structure.
  - 3. Provide caulking, sealing, and flashing as required to waterproof the building complete and as required to insulate the building thermally and acoustically. Include sealing, flashing, and related work as required to prevent moisture intrusion, air infiltration, and light leakage.
  - 4. Materials, equipment, component parts, accessories, incidental items, connections, and services required to complete the Work which is not provided by subcontractors shall be provided by the Contractor.

1.06 COOPERATION WITH OTHER CONTRACTORS:

- A. Leahi reserves the right at any time to contract for or otherwise perform other or additional work within the Project Contract Limits. The Contractor of this project shall to the extent ordered by the HHSC Representative, conduct its work so as not to interfere with or hinder the progress or completion of the work performed by Leahi or other contractors.

1.07 SUBMITTALS:

- A. Furnish required submittals specified in this Section and in the Technical Sections. Submittals include one or more of the following: shop drawings, color samples, material samples, technical data, material safety data information, schedules of materials, schedules of operations, guarantees, certifications, operating and maintenance manuals, and field posted as-built drawings.
- B. Record Drawings: Field Posted As-Built Drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be prepared and submitted by the Contractor. To accomplish this, the following procedure shall be followed by the Contractor:
  - 1. A full-size set of field posted as-built drawings shall be maintained at the job site. All deviations from alignments, elevations and dimensions which are stipulated on the drawings and authorizations given by the HHSC Technical Representative to deviate from the drawings shall be clearly and accurately recorded by the Contractor on this set of record drawings.
  - 2. Changes shall be recorded immediately after they are constructed in place to assure they are not forgotten. Record the changes in red pencil and where applicable, refer to the authorizing document or Change Order. The field posted as-built drawings shall be made available to the Engineer and HHSC Technical Representative at any time so that its clarity and accuracy can be monitored.
  - 3. The words "FIELD POSTED AS-BUILT" shall be labeled on the title sheet and certified by the Contractor as to accuracy and completeness as shown below:

FIELD POSTED AS-BUILT

Certified By: \_\_\_\_\_ Date: \_\_\_\_\_  
Contractor (Include name and company)

- 4. The words "FIELD POSTED AS-BUILT" shall be labeled on all sheets in the margin space to the right of the sheet number written from the bottom upward.

5. The Index to Drawings shall be revised with the label "FIELD POSTED AS-BUILT" for each sheet. The index shall conclude with the following note: "A COMPLETE SET CONTAINS \_\_\_\_ SHEETS" with the total number of sheets comprising the set to be placed in the blank.
6. Any "FIELD POSTED AS-BUILT" drawing which the Engineer determines does not accurately record the deviation may be corrected by the Engineer and the Contractor shall be charged for the services.
7. Submit the set of "FIELD POSTED AS-BUILT" drawings to the Engineer and notify the HHSC Technical Representative no later than five (5) calendar days prior to the date of final inspection.
8. "AS-BUILT" drawings will be prepared by the design consultant using the "FIELD POSTED AS-BUILT". Both sets of drawings will be sent to the Contractor for review and approval. The Contractor shall retain the "FIELD POSTED AS-BUILT" drawings for records, sign the "AS-BUILT" set of drawings, indicating approval, and return the drawings in a timely manner to the Engineer and notify the HHSC Representative.

1.08 CONSTRUCTION SCHEDULE:

- A. The Construction Schedule completion date will be approved prior to award. The daily activities of the Construction Schedule will be reviewed within fifteen (15) calendar days after the Notice to Proceed or upon earlier written instruction by HHSC.
- B. The schedule shall be related to the entire project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the work. If requested by the Engineer or HHSC Representative, the Contractor shall participate in a preliminary meeting to discuss the proposed schedule and requirements prior to submission of the schedule.
- C. Contractor shall prosecute the work according to the Schedule. The Engineer and HHSC Representative shall rely on the reviewed Contractor's Schedule and regular updates for planning and coordination. The HHSC Representative's review of the Contractor's Construction Schedule does not relieve the Contractor of its obligation to complete the work within the allotted contract time. Nor does the review grant, reject or in any other way act on the Contractor's request for adjustment(s) to complete remaining contract work, or for claims of additional compensation. Such requests shall be processed in accordance with other relevant provisions of the contract.
- D. If the Engineer issues a Field Order or Change Order or requires Force Account Work that affects the sequence or duration of work activities noted on the construction progress schedule, the Contractor shall promptly update the schedule. This shall be accomplished by adding,

deleting or revising the work activities noted, or changing the logic in the schedule to show the Contractor's plan for incorporating the change into the flow of work. All Change Orders and Time Extension requests that affect the construction schedule shall be evaluated based on their impact on the approved Construction Schedule.

1.09 MEETINGS:

- A. Contractor shall meet with Leahi's representative, weekly or other interval as determined, to discuss the progress of the Work.
- B. For each meeting, Contractor shall take meeting minutes and provide a list stating all items, work or material, which may cause a delay or have an impact on the project's contractual dates. The list shall be inclusive of items requiring action from all responsible parties such as outstanding submittal status, request for information (clarification), force account work, change order, and change proposals. The format of this list shall be at the Contractor's discretion, subject to the Engineer's approval. Submit the list to all parties for discussions as a meeting agenda. Contractor shall provide a plan of corrective action for any item, which is delayed or expected to be delayed, where that item impacts the contractual dates.

1.10 PROJECT AND SITE CONDITIONS:

- A. Project Contract Limits (Contract Zone Limits) shown on the drawings indicate only in general the limits of the work involved. Perform necessary and incidental work, which may fall outside of these demarcation lines. Confine construction activities within the Project Contract Limits and do not spread equipment and materials indiscriminately about the area.

1.11 SANITARY FACILITIES:

- A. The Contractor shall be allowed to utilize on-site restrooms as directed by the Architect and/or HHSC Representative. The Contractor shall maintain the facility in clean and sanitary condition at all time. Failure to do so, may require the Contractor to provide portable temporary toilet facilities for the contractor's use.

1.12 CONSTRUCTION AIDS:

- A. Provide construction aids and equipment required by construction personnel and to facilitate execution of the Work including: scaffolds, ladders, ramps, platforms, railings, and other such facilities and equipment.

## **PART 2 - MATERIALS**

### 2.01 QUALITY:

- A. Materials, items, equipment and fixtures specified in the various Divisions and Sections shall be new unless otherwise specified.

### 2.02 STORAGE AND HANDLING:

- A. Contractor shall supervise jobsite delivery and handling, and assign storage space for materials, items, equipment and fixtures of all trades. Contractor and installer are responsible for delivery, unloading, unpacking, handling, storage, distribution, installation and protection of its materials at the jobsite.
- B. Except as otherwise required by these specifications or by Leahi, determine and comply with manufacturer(s) recommendation(s) on product handling, storage and protection.
- C. Deliver products to the jobsite in manufacturer's original containers, with labels intact and legible. Maintain packaged material with seals unbroken and labels intact until time of use. Promptly remove damaged materials and unusable items from the jobsite, and promptly replace with material meeting the specified requirements, at no additional cost to Leahi.
- D. The Architect may reject as non-complying such material and products that do not bear identification satisfactory to the Architect as to manufacturer, grade, quality, and other pertinent information.

## **PART 3 - EXECUTION**

### 3.01 EXAMINING THE SITE:

- A. Contractor and Subcontractors are expected to visit the site and make due allowances for difficulties and contingencies to be encountered. Compare contract documents with work in place. Become familiar, with existing conditions, the conditions to be encountered in performing the Work, and the requirements of the drawings and specifications.
- B. Verify construction dimensions and elevations indicated on the drawings before any construction begins. Any discrepancy shall be immediately brought to the attention of the Engineer, and any change shall be made in accordance with the Architect's instruction. Contractor shall not be entitled to extra payment if it fails to report the discrepancies before proceeding with any work whether within the area affected or not.

- C. Obtain all field measurements required for the accurate fabrication and installation of the Work included in this Contract. Exact measurements are the Contractor's responsibility.
- D. Furnish or obtain templates, patterns, and setting instructions as required for the installation of all Work. All dimensions shall be verified in the field.
- E. The Contractor shall accept the site in the condition which exists at the time access is granted to begin the Work.
  - 1. Verify existing conditions and dimensions shown and other dimensions not indicated but necessary to accomplish the Work.
  - 2. Locate general reference points and take action to prevent their destruction. Lay out work and be responsible for lines, elevations and measurements and the work executed. Exercise precautions to verify figures and conditions shown on drawings before layout of work.
  - 3. Before starting the Work, the Contractor and each Subcontractor, shall verify governing dimensions and shall examine adjoining work on which the Contractor's work is in any way dependent. No additional compensation will be allowed on account of differences between actual measurements and dimensions shown. Submit differences discovered during the verification work to the Engineer for interpretations before proceeding with the associated work.

3.02 UTILITY SERVICE:

- A. Electricity - Make arrangements with the facilities for temporary use of electricity for construction use.
- B. Telephone - Make arrangements with the utility companies for temporary telephone service for construction use or utilize cellular phone service.
- C. Water - Make arrangements for temporary water use with the facilities.

3.03 ENVIRONMENTAL:

- A. General Contractor shall oversee that proper environmental conditions are met regarding temperature, humidity, lighting and ventilation.

3.04 PREPARATION AND PROTECTION:

- A. Protection of Property: Continually maintain adequate protection of the Work from damage and protect all property, including but not limited to buildings, equipment, furniture, grounds, vegetation, material, utility systems located at and adjoining the job site. Repair, replace or pay the expense to repair damages resulting from Contractor's fault or negligence.

- B. Before starting work to be applied to previously erected constructions, make a thorough and complete investigation of such recipient surfaces and determine their suitability to receive required additional construction and finishes. Contractor, at its expense, shall make whatever repairs and conditioning required to properly prepare such surfaces. Contractor shall coordinate the work to provide a suitable surfaces to receive following work.
- C. Commencement of work by any trade will be construed as acceptance of existing conditions and surfaces as being satisfactory for application of subsequent work, and full responsibility for finished results and assumption of warranty obligations under the Contract.
- D. Protect existing work in a manner to prevent damage including interior work from damage by vandals or the elements. Provide temporary protection. Use curtains, barricades, or other appropriate methods. Take positive measures to prevent breakage of glass and damage to plastic, aluminum and other finishes.
- E. Repairs and Replacements: In event of damage, promptly make replacements and repairs to the approval of the Engineer and/or HHSC Representative and at no additional cost to Leahi. Additional time required to secure replacements and to make repairs will not be considered to justify an extension in the Contract Time or completion.

### 3.05 BARRICADE:

- A. Erect temporary construction barricade(s) to prevent unauthorized persons from entering the project area and to the extent required by the Engineer and/or HHSC Representative.
- B. Maintain temporary construction barricade(s) throughout the duration of the Work. During the course of the project, the Engineer and/or HHSC Representative may require additional barricades be provided for the safety of the public. Contractor shall erect the additional barricade(s) at its own expense.

### 3.06 INSTALLATION:

- A. Materials, items, fixtures required by the various Divisions and Sections of the Specifications shall be installed in accordance with Contract Documents, by workers specially trained and skilled in performance of the particular type of work, to meet guarantee and regulatory agency requirements. Should the drawings or specifications be void of installation requirements, install the materials, items, fixtures in accordance with the manufacturer's current specifications, recommendations, instructions and directions, and/or best construction industry standards.

3.07 CUTTING AND PATCHING:

- A. General Contractor shall oversee cutting and patching of concrete, masonry, structural members and other materials where indicated on drawings and as job conditions require. Unless noted elsewhere in the Drawings and Specifications, no cutting or patching of existing or new structural members will be permitted without previously notifying the HHSC Technical Representative.
- B. Patching materials and workmanship shall be of equal quality to that indicated on the drawings, specified for new work, and/or to match the construction of item to be patched.

3.08 CLEAN-UP:

- A. Rubbish and debris resulting from work of the various Divisions and Sections of the specifications shall be collected and disposed of by the Contractor at legal disposal areas away from the project site. Clean up and remove from premises all debris accumulated from operations from time to time and as directed by the Engineer and/or HHSC Representative. Permission to provide on-site trash containers shall be granted by Leahi and shall be placed where directed by the Architect and/or HHSC Representative.

END OF SECTION

## SECTION 01100 - SUMMARY OF WORK

### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES:

- A. Contract description.
- B. Contractor use of premises.
- C. Owner furnished/Owner installed products.
- D. Owner furnished/contractor installed products.
- E. Hospital occupancy.

#### 1.02 CONTRACT DESCRIPTION:

- A. Description: Modify the existing Heat Pump Room's envelope to mitigate noise transmission to nearby spaces:
  - 1. Replace current metal mesh screen wall with gypsum board.
  - 2. Replace old heat pump with a new smaller one
  - 3. Provide a new air intake path through the hot water plant room to utilize the existing opening, and replace current duct to match airflow requirement
  - 4. Remove/relocate electric switch and light off the existing wall which both will be reused and mounted back in place.
- B. Contract Documents Identification: These are identified as: *HHSC: Leahi, Sinclair Building Heat Pump Sound Attenuation dated January 23, 2026.*
- C. Contractor shall complete the attached Bid Breakdown with Contractor's Proposal (Bid Breakdown is at the beginning of the specifications).
- D. Related Provisions: The following applies to all the Work.
  - 1. Conditions of the Contract.
  - 2. Contract Drawings.
  - 3. Division 1 Specification Sections.
  - 4. As applicable to each Entity, the appropriate Specification Sections and related Specification Sections of other Installers as necessary for the proper coordination of Work.
  - 5. Modifications to the Contract, if any.
- E. Special Submittals: In addition to other documentation as may be required by the Contract Documents, submit following as a condition for securing the Contract for the Work.
  - 1. List of Primary Contractors: List of primary Subcontractors (Installers) for each work as specified in each Division 2 through

- Division 16 Sections. Include company name, primary contact, telephone number, fax number, and e-mail address.
2. List of Primary Products: List of primary products bid for each Division 2 through Division 16 Sections. Include manufacturer name and specific product name or names.
  3. Certification: Installer certification that specified requirements are in accordance with the Manufacturer requirements as specified in "Section 01600 - Product Requirements" prior to signing the Contractor for the Work.

1.03 CONTRACTOR USE OF PREMISES:

- A. Limit use of premises to allow for continued Hospital occupancy.
- B. Emergency Building Exits During Construction: Must remain open and unblocked at all times. Maintain access for staff, patients, and public.
- C. Construction Operations: Limited to areas noted on Drawings.
- D. Staging and Parking
  1. Staging area and limited contractor employee parking will be made available on site.
  2. Repair and clean pavements and restore landscaping in staging areas at the completion of construction operations.
- E. Time Restrictions for Performing Work:
  1. General: 9:00 am to 5:00 pm. Coordinate w/ Owner, work necessary outside these normal operating hours. Submit written notice a minimum three days in advance.
- F. Cooperate with Leahi to minimize conflict and to facilitate Leahi's operations. Coordinate operations with Leahi's Technical Representative (TR).
- G. Access to adjacent floors must be approved in advance by Leahi. Submit written notice not less than seven days in advance of intended work on adjacent floors.
- H. Do not close or obstruct roadways without first consulting with the Owner. Conduct operations with minimum interference to public or private roadways.
- I. Maintain vital services with the minimum of interruption. Outages and interruptions must be approved in advance by Leahi. Submit written notices of outages and interruptions not less than seven days in advance.
- J. Contractor's personnel:
  1. Do not allow personnel to park off site.
  2. Contractor's personnel may use Leahi's cafeteria.

3. Smoking is not permitted anywhere on Leahi's property. Consumption of food and beverages will not be permitted on the premises except in designated areas.
  4. Playing of radios will not be permitted.
  5. Shall be properly attired for work. (No tank tops, cut-off jeans, slippers, etc.)
  6. Shall conduct themselves with decorum and courtesy toward staff, patients, and public.
  7. Shall not use loud and offensive language.
- K. Construction Zone Accessibility Requirements
1. General: Hawaii Revised Statutes (HRS)103-50 requires this project to conform to the requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG).
  2. Ensure accessible routes to emergency entrances and exits to and from accessible parking public pedestrian routes during the construction period as required by ADAAG 4.1.1(4).
  3. Temporary buildings and facilities that are not of permanent construction but are extensively used or are essential for public use for a period of time shall be accessible.
  4. Provide temporary safe pedestrian passageways around a construction site.
    - a. Areas that are used only as work areas shall be designed and constructed so that individuals with disabilities can approach, enter, and exit the areas.
    - b. These guidelines do not require that any areas used only as work areas be constructed to permit maneuvering within the work area or be constructed or equipped (i.e., with racks or shelves) to be accessible.

#### 1.04 LEAHI OCCUPANCY:

- A. Leahi will remain operational during entire period of construction for the conduct of normal operations.
- B. The Contractor is to coordinate the work and details within each phase, to minimize disruption to Leahi's Technical Representative's operation. Proper notification of disruption due to noise and other factors is required.
- C. Provide dust and noise barriers where specified under other portions of the contract documents. Follow infection control procedures during construction, i.e. Policy #125-54 as attached. Walk off mats at site entrance shall be changed as needed. HEPA filtration units are to be utilized 24 hours per day throughout the construction process. Complete Interim Life Safety Measures check sheet daily. Portable dust barriers shall be utilized for AC replacement work.

- D. Schedule the Work, and cooperate with Leahi to minimize conflict with, and to facilitate Leahi's operations. Take extreme care and caution with work involving dust, noise, and odor.

1.05 QUALITY ASSURANCE:

- A. Other Contract Related Documents: If required by Contractor to determine accurate information for the Project, review such other documents in possession of Leahi and the Project Consultants that have a bearing on the Contractor's Work; examples as follows:
  - 1. Available documents of existing facilities
- B. Authority Related: Comply with the following:
  - 1. Regulations: All laws, ordinance, rules, and regulations, by any governmental authority, which in any manner apply to or affect those employed in the Work, the materials used in the Work, and the conduct of the Work. Comply with all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the Work and which are or have the affect of law.
  - 2. Disabled Persons:
    - a. ADAAG or UFAS compliance: Applicable requirements or where both is used, comply with the stricter of the requirements applicable to each work.
    - b. Tolerance: Due to actual variations in work tolerances, ensure that each work meets the minimum or maximum dimensions as required by the applicable standard,
    - c. Authority Changes: Where Authority directs changes in the Work, immediately notify consultants, prior to execution of such changes, to ensure such changes are not in conflict with any original approvals made by Authorities.
- C. Community Related:
  - 1. Intent: Owners operation is public sensitive and Contractor shall take necessary precautions in his operations as not to upset or aggravate the public, e.g. polluting operations, other nuisance conditions, and operations which can endanger people, illegal activities, unbecoming conduct, etc.
  - 2. Resolving Contentious Issues: It is the Contractor's responsibility to resolve any contentious issues amenably, fairly, and expeditiously. If a situation occurs, notify the Consultants immediately and keep Consultants informed of methods and results of ongoing negotiations in resolving any issues. Not under any circumstances is Contractor to place Owner in precarious situation that could place owner in a tenuous conflict with any of the public, without the Owner's knowledge. Contractor is ultimately and solely responsible for his actions and resulting outcomes; regardless of Owner's knowledge of any ongoing contentious events and shall hold Owner harmless from such issues should they result in any litigation.

- D. The Work:
  - 1. Industry Standards: Industry standards apply to the Work whether indicated or not. When not indicated, the industry accepted quality applicable to the class (grade) of work intended shall apply.
  - 2. Completeness of Work: Provide necessary work normally provided for the quality of work indicated to ensure the Work is complete and fully functional for each use.
- E. Project Manual:
  - 1. Language: Imperative language is intended and specified requirements are to be executed.

## **PART 2 - PRODUCTS (Not Used)**

## **PART 3 - EXECUTION**

### 3.01 TIMES FOR CONDUCTING WORK:

- A. Daily: In accordance with any Owner's standard published policies for Contractor's conducting work on premises. Secure standards and comply with requirements; unless Owner otherwise agrees to in writing at time of signing Contract for the Work.
- B. Weekends: As approved at time of signing Contract for the Work; otherwise as approved by Owner.
- C. Other Time Restrictions:
  - 1. General: Refer to "Operational Restrictions" paragraphs herein and "Section 01500 - Temporary Facilities and Controls".
  - 2. Polluting Operations: Verify time restrictions on polluting operations, e.g. dust, noise, or any other that may be restricted by Owner and include impacts into Contract for the Work.
  - 3. Special Events: Verify any Owner known and potential scheduled events that would interrupt Contractor's operations and include impacts into Contract for the Work.

### 3.02 OPERATIONAL RESTRICTIONS:

- A. General: Refer to "Section 01500 - Temporary Facilities and Controls".
- B. Physical Limits: Limit Primary Work to immediate Project Site. Work required on property outside of Project Site, to be done in accordance with the Authorities.
- C. Personal Conduct, General: Owner's work is public sensitive and Contractor and entities under Contract to him shall respect this and

refrain from any conduct that would compromise the Owner. Public sensitive issues include, but are not necessary limited to, following.

1. Outside Site/Work Envelope: Any operations that could negatively affect surrounding community adjacent to Site, e.g. noise, pollution, illegal activities, etc.
  2. Within Site and Work Areas:
    - a. Archeological or historical related funds.
    - b. General: Any conduct that could negatively affect It's employees and public, e.g. disrespectful and unacceptable language, use of inappropriate alcohol usage at inappropriate times, illegal activities, smoking in non- smoking areas, etc.
    - c. Radios: Not allowed; except two-way communication radios.
    - d. Meals: Eaten only in Owner approved areas.
    - e. Building Areas: Any restricted public and non-public areas on property and within any building structures.
- D. Other Owner Conditions for Performing Work: Work is to be scheduled around the Owner's ongoing operations. Prior to Bid verify following and include impacts into Contract for the Work.
1. Verification of Owner's responsibilities with regard to condition in which each space and surface will be turned over to Contractor and verification of exact degree of preparation work required by Contractor.
  2. Verification of extent of each work to be painted and conditions of acceptability.
  3. The degree to which Contractor is required to remove or move equipment, furnishings, and other work.
  4. Sequence, timing, and extent of areas to be made available to Contractor to complete the required work.
  5. Limits and restrictions placed on use of each work area.
  6. Methods of moving material and equipment around, within, to and from staging and delivery areas to each work area.
  7. Methods for conducting the work due to Contractor's operations which are restrictive to Owner's ongoing operations.
  8. Degree and duration in which equipment and materials may be left in place.
  9. Available parking.
  10. Available services, such as for power and water.
  11. Available facilities, such as restrooms.
  12. Available staging areas.
  13. Availability of elevators for the Work.
  14. Conditions under which Owner's available facilities and services are provided.
  15. Restrictions on generation of noise.
  16. Security required.
  17. Safety precautions and amount of protections required.
  18. Degree of cleanliness and orderliness expected in Work areas.
  19. Special activities of Owner occurring during course of Work and which could impact Contractor's ongoing Work.

20. Verification of all Owner work impacting Work of this Contract, if any.
21. Verify salvageable work, if any, required by Owner and conditions of delivery to Owner.
22. Other Owner requirements.

END OF SECTION

## **SECTION 01120 - ALTERATION PROJECT PROCEDURES**

### **PART 1 - PRODUCTS**

#### 1.01 SALVAGED MATERIALS:

- A. Salvage sufficient quantities of cut or removed material to replace damaged work of existing construction, when material is not readily obtainable on current market.
- B. Incorporate salvaged or used material only as indicated or with permission of Leahi.

#### 1.02 PRODUCTS FOR PATCHING AND EXTENDING WORK:

- A. New Materials: Match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspection and testing products where necessary, referring to existing Work as a standard.

### **PART 2 - EXECUTION**

#### 2.01 EXAMINATION:

- A. Verify that demolition is complete, and areas are ready for installation of new Work.
- B. Beginning of restoration Work means acceptance of existing conditions.

#### 2.02 PREPARATION:

- A. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- B. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- C. Remove debris and abandoned items from area and from concealed spaces.
- D. Prepare surface and remove surface finishes to provide for proper installation of new work and finishes.

- E. Close openings in exterior surfaces to protect existing work and salvage items from weather and extremes of temperature and humidity. Insulate duct work and piping to prevent condensation in exposed areas.
- F. Do not demolish, chip, or penetrate existing structural members without the expressed approval of the Engineer.
- G. Perform cutting and removal work to remove minimum necessary, and in a manner to avoid damage to adjacent work and provide proper surfaces to receive installation of repair and new Work.

2.03 INSTALLATION:

- A. Coordinate work of alterations and renovations to expedite completion and to accommodate Owner occupancy.
- B. Project areas and Finishes: Complete in all respects including operational mechanical and electrical work.
- C. Remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original or specified condition as appropriate.
- D. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.
- E. In addition to specified replacement of equipment and fixtures, restore existing plumbing, ventilation, air conditioning, and electrical systems to full operational condition.

2.04 TRANSITIONS:

- A. Where new Work abuts or aligns with existing, perform a smooth and even transition. Patched Work to match existing adjacent Work in texture and appearance.
- B. Cut finish surfaces such as masonry, tile, plaster, or metals by methods to terminate surfaces in a straight line at a natural point of division.
- C. When finished surfaces are cut so that a smooth transition with new Work is possible, terminate existing surface along a straight line at a natural line of division. Provide trim appropriate to finished surface subject to approval of Leahi's Representative.

2.05 ADJUSTMENTS:

- A. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls and ceilings to a smooth plane without breaks, steps or bulkheads.
- B. Where a change of plane 1/4 inch or more occurs, submit recommendation for providing a smooth transition for Leahi's Representative review.
- C. Trim existing doors as necessary to clear new floor finish. Refinish trim as required.
- D. At penetrations of fire-rated wall, ceiling, or floor construction, completely seal voids with fire rated, fire resistant material, full thickness of the construction element.

2.06 REPAIR OF DAMAGED SURFACES:

- A. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- B. Repair substrate prior to patching finish.

2.07 FINISHES:

- A. Finish surfaces as specified in individual Product Sections.
- B. Finish patches to product uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

2.08 CLEANING:

- A. In addition to cleaning as specified in these specifications. Broom-clean owner-occupied areas daily.
- B. Clean spillage, over-spray, and dust in Owner-occupied areas immediately.

**PART 3 - EXECUTION (Not Used)**

END OF SECTION

## SECTION 01140 - WORK RESTRICTIONS

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. This section includes work restrictions on the Contractor's operations, and construction as required to maintain the facility's operation during the construction period.
- B. Construction Provisions:
  - 1. Rules and Regulations: Consult with the Engineer and HHSC Representative at the pre-construction conference and become familiar with the rules and regulations of the facility.
  - 2. Contractor's Operations: Confine all construction operations to the immediate vicinity of the construction activity. Store building materials, equipment, tools and incidentals in an enclosed area as directed by the HHSC Representative. Take precautions and prevent access to power equipment, tools, etc., by other than authorized construction personnel. Perform operations to insure the safety of the occupants of the buildings at all times.
  - 3. Perform operations to minimize inconvenience or disturbance upon the personnel and residents.
  - 4. Protection of occupants: Special consideration must be made by the Contractor at all times to safely protect the occupants and facility personnel from any and all injuries that may be caused as a result of the work performed under this contract.
  - 5. Caution: The Contractor shall caution his personnel on the job that any association with the occupants be avoided as much as possible, that when spoken to by occupants, normal courtesy shall be maintained at all times.
  - 6. None of the foregoing regulations shall be construed as a restriction on the legal prosecution of the work.

#### 1.02 SEQUENCING OF WORK:

- A. The Contractor shall schedule his work in general consideration for the on-going operation of Leahi. All work shall be coordinated with the HHSC Representative.
- B. Stoppage of work for the duration of CMS and State Survey audits shall not incur additional costs to the HHSC.
- C. All work shall be coordinated and scheduled with Leahi and/or HHSC Representative. In general, the Contractor will be restricted to work areas as coordinated with the HHSC Representative.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION (Not Used)**

END OF SECTION

## SECTION 01210 - ALTERNATES

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Alternates.
- B. Related Sections:
  - 1. Division 1 Sections.
  - 2. As indicated in scheduled Alternate descriptions.

#### 1.02 DEFINITIONS:

- A. Alternate
  - 1. General Definition: A lump sum amount proposed by Bidders and stated on the Bid Form for certain construction activities defined in the Bidding Requirements that may be added to or deducted from Base Bid amount if the Owner decides to accept a corresponding change in either the amount of the construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents.
  - 2. Proposed Cost: Each proposed amount for an Alternate to be complete and include entire Bidder's cost for the alternate work. No other adjustments to the Contract Sum will be allowed after signing of Contract for the Work.
  - 3. Work Included: Each proposal for an Alternate to represent all work, e.g., materials and its related workmanship, required to incorporate the work in place. In addition to other work, proposed work for each alternate to include work and coordination required to modify adjacent work at time each alternate required.
  - 4. Owner Action: Owner reserves the right to take action or no action on any Alternate during course of Contract Period. Each proposal to be non retractable and held without change during the Contract Period, except added costs may be negotiated when submitted written documentation is provided that clearly show that added time affects Progress Schedule or added scope of Work for any Alternate has changed by time of Owner acceptance and reasonably affected Contractor's cost to do the work. Any requested added costs are to be for added work and shall not change the cost of any work as proposed by the original proposal.

#### 1.03 SUBMITTALS:

- A. Intent: Submit Change Order Proposals: Submit proposals for work required by Project Consultant's to fully evaluate compliance with Project requirements, e.g., written detailed cost breakdowns, related product

data, published drawings, specifications, tested, performances, and samples.

- B. Progress Schedule: Incorporate into first Progress Schedule required for submittal.
  - 1. Time for Owner's Decision: Indicate latest time when Owner's decision for each Alternate must be made to ensure that each Alternate, if accepted does not increase cost proposed for each Alternate and does not affect Contract Progress Schedule.
  - 2. Notifications: Notify Project Consultants and parties affected by Alternates as to status of Alternates during course of Work to ensure proper and timely coordination. Addendum: relative to allowances in form of Change Order proposals. Itemize in detail, quantities and unit prices of materials, products, and assemblies required, in addition to any other reasonable Contractor's costs for review by Consultants. The proposed work shall be complete assessed to address all changes as a result of the work, and shall not result in additional changes.

1.04 QUALITY ASSURANCE:

- A. Submittals: Prior to purchase and fabrication of any materials, provide Consultants requested submittals and secure successful review for all design considerations.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION**

3.01 ADMINISTRATION:

- A. Prior to signing Contract for the Work: Meet with the Owner and Consultants and clearly define scope of work included in each Alternate and conditions for administration of Alternate work. Incorporated changes to scope of Contract, if required.
- B. After Signing Contract for the Work: Upon written notification from Owner of acceptance of any Alternate, institute procedures in accordance with the Contract for changes to the Work

3.02 INSTALLATION OF ALTERNATE WORK:

- A. General: Coordinate adjacent Work and install products in accordance with successfully Consultants reviewed submittals and each Manufacturer's Project specific requirements.

3.03 SCHEDULE:

- A. Alternate No. 1
  - 1. Alternate Type: Additive
  - 2. Include in Base Contact: Not applicable.
  - 3. Alternate: Cos to add item(s) as indicated on Drawings.

END OF SECTION

## **SECTION 01290 - PAYMENT PROCEDURES**

### **PART 1 - GENERAL**

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Applications for payment.
- B. Related Sections:
  - 1. Division 1 Sections.
  - 2. "Section 01330 - Submittal Procedures".
  - 3. "Section 01320 - Construction Progress Documentation".

#### 1.02 SUBMITTALS

- A. Application for Payment Documents: Submit following.
  - 1. Application for Payment documents.
  - 2. Schedule for Values documents.
  - 3. Supporting documentation.
- B. Number of Submittal Sets: Refer to "Section 01330 - Submittal Procedures".
- C. Quality Assurance Submittals: Refer to "Quality Assurance" paragraphs herein.

#### 1.03 QUALITY ASSURANCE:

- A. Content and Format Approval: Adjust format to satisfaction of Consultants.
- B. Accuracy, Completeness, Coordination of Scheduled Values: Each scheduled item in Schedule of Values and Applications for Payment document submittals to be accurate, complete, and fully coordinated between documents, including cost information.
- C. First Submittal of Schedule of Values: Submit prior to signing of Contract for the Work. Intent: Submit Change Order Proposals: Submit proposals for work required by Project Consultant's to fully evaluate compliance with Project requirements, e.g., written detailed cost breakdowns, related product data, published drawings, specifications, tested, performances, and samples.

### **PART 2 - PRODUCTS (NOT USED)**

### **PART 3 - EXECUTION**

#### **3.01 APPLICATION FOR PAYMENT-GENERAL:**

- A. Submittal Time:
  - 1. Draft Copies: Seven (7) calendar days before the date scheduled for submittal of the formal Application for Payment.
  - 2. Formal Submittal: Submit corrected Application on regular dates each month; agreed to before signing Contract for the Work; otherwise Owner to determine regular scheduled dates.
  
- B. Review Process:
  - 1. Consultants:
    - a. Draft Submittal: Review draft. Forward copy to Owner. Make corrections, if required. Return to Contractor after reviews completed and advise Contractor of any actions, if any required.
    - b. Formal Submittal: Review. Sign and forward to Owner.
  - 2. Owner: After satisfactory review of documents, sign and forward documents for payment. Pay Contractor. Prior to signing Contract for the Work: Meet with the Owner and Consultants and clearly define scope of work included in each Alternate and conditions for administration of Alternate work. Incorporated changes to scope of Contract, if required.

#### **3.02 APPLICATION FOR PAYMENT-PRIMARY FORMS:**

- A. Documents: Execute on AIA Forms, G702 and Continuation Sheets G703. Information to be correlated with Schedule of Values.

#### **3.03 SCHEDULE OF VALUES:**

- A. Breakdown-Level of Detail:
  - 1. General: Each principal subcontract amount to broken down into sufficient detail and organized into a format as to facilitate reasonable and continued evaluation of the progress of each subcontract for duration of Project.
  - 2. Stored Work: List separately. Distinguish work stored on-site and those stored off-site. Show insurance coverage and bonded warehousing costs.
  - 3. Contractor's Option: Temporary facilities and other major cost items that are not direct cost of any specific scheduled work may be shown as separate line items in the schedule of values or distributed as general overhead expense.
  
- B. Format: In addition to any other format requirements, include following.
  - 1. Project Identification: For each set, indicate following.
    - a. Contractor's name and address.

- b. Contractor's Project submittal tracking number. Put on every sheet of each submittal set.
    - c. Date of submittal. Put on every sheet of each submittal set.
    - d. Consultant's Project number, name, location.
    - e. Consultant's name.
  2. Tabular Schedule: For each scheduled value, provide data for following items in a table under separate columns; organize similar to Project Manual Technical Specifications.
    - a. Generic description of the work.
    - b. Related Specification Section.
    - c. Name of Subcontractor.
    - d. Name of Primary Manufacturer or Fabricator.
    - e. Name of Supplier.
    - f. Amounts for each value as a percentage and actual dollar value.
    - g. Change Orders that have affected each value.
- C. Amounts:
  1. Completeness: Each scheduled value to be complete cost for that work and include proportionate values for overhead, profit, and taxes.
  2. Values as Percentage: Percent of total Contract Sum; to nearest one hundredth percent.
  3. Dollar Values: Round to nearest whole dollar.
  4. Contract Sum Reconciliation: All scheduled values to add up to Contract Sum.
- D. Schedule Updating: Update and submit for following.
  1. With each Application for Payment.
  2. When Change Orders result in a change in Contract Sum.

3.04 FIRST APPLICATION-CONDITIONS AFFECTING:

- A. List of Subcontractors.
- B. Contractor's Progress Schedule.
- C. Schedule of principal products.
- D. Submittal Schedule.
- E. List of Contractor's staff assignments.
- F. Initial Progress Report.

3.05 APPLICATION AFTER SUBSTANTIAL COMPLETION-CONDITIONS AFFECTING:

- A. Submittals Due Prior to Application: Complete Closeout Submittals and Procedures.

3.06 FINAL APPLICATION-CONDITIONS AFFECTING:

- A. Full completion of all work to satisfaction of The Consultants and Owner.
- B. Full completion of all required Closeout submittals and procedures.
- C. Proof of payment of all obligations.
- D. Removal of all Contractors' work.
- E. Removal of surplus materials, rubbish, and similar elements.
- F. Satisfactory final cleaning of all work.

3.07 SUPPORTING DOCUMENTS:

- A. Waivers of Mechanic's Lien:
  - 1. Intent: Submit waivers of mechanic's lien from every Entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by payment. Waivers to show reasonable, timely, and regular payment by Contractor to Entities completing work performed for him.
  - 2. Form: Acceptable to Owner.
  - 3. Information: Each waiver to include Subcontract Sum amount, total of payments made (prior to last payment), and current work, payment, and date of payment covered by waiver.
- B. Other: If required by the Consultants, submit receipts or vouchers for payment of labor and materials from Entities and other documentation confirming work claimed for in each Contractor's Application for Payment.
- C. Specified in Other Sections: As follows.
  - 1. Updated Progress Schedules.

END OF SECTION

## **SECTION 01296 - CONTRACT CLARIFICATIONS**

### **PART 1 - GENERAL**

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Request for Information (RFI) procedures.
  - 2. Change Orders procedures.
- B. Related Sections:
  - 1. Division 1 Sections.

#### 1.02 SUBMITTALS:

- A. General: As specified herein.

#### 1.03 QUALITY ASSURANCE:

- A. RFI Content: Make one single request per RFI. Multiple requests under a single RFI number will be rejected.
- B. Basis of RFI's:
  - 1. Contractor Responsibility: RFI's are to be used as a method to clarify the intent of Contract Documents when such intent is not readily evident. It is the responsibility of the Contractor to make a reasonable review of the Contract Documents to ensure that the requested information is not readily inferable from the Contract Documents.
  - 2. Reimbursable Costs: Should The Consultants determine that any RFI could have been reasonably inferred from the Contract Documents, the Consultant reserve the right to deduct a fair and reasonable amount for the time and effort expended by them or their Consultants from the Contract Sum. This is not a penalty, but a fair reimbursement of a cost that the Contractor should have otherwise expended in researching the information.

### **PART 2 - PRODUCTS (Not Used)**

### **PART 3 - EXECUTION**

#### 3.01 REQUEST FOR INFORMATION (RFIs):

- A. Time of Submittal: As soon as issue requiring clarification arises.
- B. RFI Form: Form to be provided by the Consultants.

- C. Submittal: Submit following.
  - 1. Identification of Affected Work: Submit list of Contract drawn work and Specifications affected.
  - 2. Supporting Data:
    - a. General: Submit applicable supporting data, drawings, and materials as required or as otherwise requested by the Consultants. Attach to RFI.
    - b. Field Conditions: If required or requested by the Consultants, submit "As-Built Drawings" complying with "Section 01785 - Project Record Documents".
  - 3. Solutions: Propose potential solutions

### 3.02 CHANGE ORDERS (MODIFICATIONS):

- A. Proposal Requests:
  - 1. Basis: When changes are made in the Work that require an equitable adjustment to the Contract amount and/or time, submit to The Consultants a written proposal for adjustments to the Contract.
  - 2. Adjustment to Cost: With proposal, submit detailed itemized breakdown, including following.
    - a. Material quantities and item cost.
    - b. Labor costs by material item.
    - c. Construction equipment cost.
    - d. Workmen's compensation and public liability insurance.
    - e. Overhead.
    - f. Profit.
    - g. Taxes. No overhead or profit will be allowed on employment taxes.
  - 3. Adjustment to Time: Submit proposal with justifications.
  - 4. Impact on Design Intent: Submit written and graphic descriptions indicating how proposal differs from original design intent, e.g., physical differences, aesthetic differences in material quality, compliance with Code and Authority requirements, etc.
- B. Change Orders: For each Proposal Request in which The Consultants has determined, and Owner has approved, that equitable adjustment is be made, a Change Order will be issued in writing.

END OF SECTION

## **SECTION 01310 - PROJECT MANAGEMENT AND COORDINATION**

### **PART 1 - GENERAL**

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Administration requirements.
  - 2. Coordination of Owner's work.
- B. Related Sections.
  - 1. Division 1 Sections, general.
  - 2. "Section 01100 - Summary of Work".

#### 1.02 SUBMITTALS:

- A. General: Refer to "Execution" paragraphs herein.

### **PART 2 - PRODUCTS (Not Used)**

### **PART 3 - EXECUTION**

#### 3.01 PERSONNEL DOCUMENTATION:

- A. Submittals: Submit following.
  - 1. Superintendent: Resume of experience.
  - 2. Key Personnel and Assignments:
    - a. Company hierarchical organization related to Project from President and/or CEO on down.
    - b. Name, title, primary Project responsibility, telephone and facsimile number, and e-mail address of each personnel.
- B. When Submitted: Within ten (10) working days after Notice to Proceed.

#### 3.02 PROGRESS SCHEDULES:

- A. Type: Critical Path Method (CPM) Network Analysis System.
- B. Diagramming Method: Precedence Diagramming Method (PDM).
- C. When Submitted:
  - 1. First Submittal: Within 10 working days after Notice to Proceed.
  - 2. Updates: With each Application for Payment or within six (6) working days for each Change Order affecting Contract Scope and/or Time.

- D. Schedule Types Required:
  - 1. Summary Network Schedule: Schedule showing relationships between primary work types.
  - 2. Detailed Network Schedule: Detailed schedule required by Contractor for proper overall coordination of the Work.
- E. Format:
  - 1. Media:
    - a. Blueprints: 30" x 40" prints; two (2) sets.
    - b. Reproducible Media: 30" x 40" xerox from which blueprints can be made; one set.
  - 2. Data Required: In addition, usual network information, include following.
    - a. Sheet interface registration marks.
    - b. Legend describing all abbreviations.
    - c. Time line.
    - d. Cost loading showing cost and quantities; for each activity.
    - e. Manpower loading showing number of workmen; for each activity.
    - f. Long lead work.
    - g. Submittals to Consultants.

### 3.03 PROGRESS MEETINGS:

- A. General: Following to apply to all meetings; unless otherwise acceptable to Consultants.
  - 1. Location: Job Site or as otherwise agreed to by the Parties involved.
  - 2. Conduct of Meeting: Contractor to preside.
  - 3. Attendees: Capable of making binding and legal decisions in behalf of each Entity they represent.
  - 4. Agenda: Develop and distribute to all attending parties one (1) working day minimum, but not less than required for proper preparation by attending parties.
  - 5. Minutes:
    - a. Recording: Contractor to record and distribute written minutes within two (2) working days to all parties at meeting and to those impacted by meeting minutes.
    - b. Addenda: Parties who wish to enter revisions or add other statements for the record may do so not later than by the end of the next OAC meeting. Contractor may revise and reissue the previous minutes or record statements to next recorded minutes with specific reference to the original statements that are impacted.
- B. Contractor's Meeting: As required for proper coordination of the Work.
- C. Owner-Architect-Contractor (OAC) Meetings:
  - 1. When: One meeting each two working weeks on regularly scheduled day agreed to by Consultants and Contractor.

2. Submittals:
  - a. Agenda: Submit not less than two working days prior to each scheduled meeting.
  - b. Minutes: Submit.
  
- D. Preinstallation Conferences:
  1. General: Conduct as required or specified for proper coordination of the Work.
  2. Consultants Notification: Notify Consultants of scheduled preinstallation conference five (5) working days in advance of each. Consultants to attend when requested by Contractor or when specified that Consultants be present.
  3. Agenda: Include following.
    - a. Coordination, including potential problems.
    - b. Interface and preparation, including potential problems.
    - c. Compatibility issues.
    - d. Tolerances.
    - e. Contact compliance, including code, fire, warranty, workmanship, personnel training, and other pertinent issues.
    - f. Review of Progress Schedule, e.g., delivery, installation, etc.
    - g. Housekeeping and cleaning.
    - h. Safety procedures.
    - i. Other issues and potential conflicts.

END OF SECTION

## SECTION 01320 - CONSTRUCTION PROGRESS DOCUMENTATION

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Construction photographs.
- B. Related Sections.
  - 1. Division 1 Sections.
  - 2. All work.

#### 1.02 DEFINITIONS:

- A. Intent for Number of Photos: The number of photographs will vary and may not be required or exceed the base line maximum specified at any given time; as may be necessary to achieve photographing intent. The general intent is to compile a historical sequence and record of ongoing construction of each primary Project system or product being installed and to show concealed services that can assist the Owner in any future addition, renovation, an ongoing maintenance of his Project. Contractor and Consultants to arrive at a general understanding of desired kinds and number of photos to be taken.

#### 1.03 SUBMITTALS:

- A. Photographs: Submit photographs as follows.
  - 1. Weekly Submittals.
    - a. Number of Photos: Up to 200 photos per week.
    - b. Submittals: Submit two (2) sets of following.
      - 1. Electronic Data: Record to CD-RW or DVD disks or USB Flash Drive. Disks to be identified with data and general listing of photographs.
      - 2. Plan Drawings: Show locations of what is shown on each photograph.
    - c. When Submittals Required: Submit at end of each work week.
  - 2. Closeout Submittals: Submit following.
    - a. Electronic Data: Record on CD-RW or DVD disks or USB Flash Drive, selected Consultants and Owner photos; selected from all photos taken during duration of Project as part of Closeout submittals. Record in historical sequence and as otherwise directed by Consultants.
    - b. Hardcopies: Include hardcopy printouts on photographic paper as part of Owner's Closeout Project Manual.
    - c. Drawings: Plans showing locations of what is shown on each photo.

#### 1.04 QUALITY ASSURANCE

- A. Assigned Personnel: Contractor to assign dedicated personnel to take photographs on regular basis and to work with Consultants in properly documenting progress and details of installed work.
- B. Camera Type: High resolution digital camera producing photographs acceptable to Consultants. Resolution of camera to be highest or very close to highest commercial (not necessarily Professional) resolution available at time Project is started. Digital camera to be capable of placing data and time minimum on each photo.
- C. Electronic Data: Type of electronic data to be viewed on current Owner's computer.

### **PART 2 - PRODUCTS (Not Used)**

### **PART 3 - EXECUTION**

#### 3.01 EXECUTION:

- A. General: Consultants to continually work with assigned Contractor's personnel to work out general types of photographs to be taken.
- B. Intent-General Types of Photos Required:
  - 1. "Before" photographs of existing work that may be damaged as a result of Contractor's operations.
  - 2. Photos from distance of Site and each Project work.
  - 3. Close-up photos of each installed work to show compliance with Contract requirements.
  - 4. Close up and distant photos of concealed services in detail as necessary to assist Owner in locating each work; whether below grade and in each structure for future addition, renovation and maintenance.
  - 5. Photos of all critical details of all work.
  - 6. Distance and close-up photos of non-complying work, if any.
  - 7. Photos of any cutting and patching and restoration work, if any.
  - 8. Photos documenting Contractor procedures for accomplishing each work.
  - 9. Other as may be determined by Consultants during course of the Work.

END OF SECTION

## SECTION 01330 - SUBMITTAL PROCEDURES

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. General requirements for submittals.
- B. Related Sections.
  - 1. Division 1 Sections.

#### 1.02 SUBMITTALS:

- A. General: Refer to Contract Conditions and individual Specifications Sections.
  - 1. Administrative Submittals.
  - 2. Work Related Submittals.
  - 3. Quality Assurance Submittals.
  - 4. Closeout Submittals.
- B. Submittal Schedule:
  - 1. Type: Submit a written list of required submittals with planned date of submission and date when submittals are required to be returned to Contractor in advance of critical path and lead times required for proper procurement and fabrication of Project products.
  - 2. Submittal Review: Consultants will review Submittal Schedule and make adjustments to submission dates to allow for reasonable review period by them. Make Consultant's indicated time adjustments to review period; unless other times are agreeable to Consultants.
  - 3. Progress Schedule: Incorporate final Submittal Schedule successfully reviewed by Consultants into Progress Schedule.
  - 4. Submittal Times:
    - a. First: Refer to "Section 01290 - Payment Procedures".
    - b. Subsequent: Update and resubmit each time schedule is changed. Progress Schedule is to be simultaneously updated and resubmitted in accordance with "Section 01310 - Project Management and Coordination".

#### 1.03 QUALITY ASSURANCE:

- A. Review Period: Contractor to include adequate review period for all submittals, including but not limited to following.
  - 1. Adequate time for review by each party requiring review of submittals.
  - 2. Adequate time necessary for delivery of submittals to each party and between parties

3. Time necessary due to resubmissions for various causes, e.g., incomplete submittals, non-compliance of submitted work, clarifications, design changes, etc.
  4. Each review period to be in advance of Progress Schedule critical path and lead time dates for proper procurement, manufacturer, delivery, and installation of materials.
- B. Completeness of Submittal Package: Any single submittal package which is not representative of all required submittals for each work is not acceptable. Consultant's successful review of piecemeal submittals to be considered conditional; until review of all submittals has been completed; to minimize errors in determining Contract compliance, e.g. initial selection from product data does not differ from actual Project samples.
- C. Submittal Project Specificity:
1. General: Submittals to be clearly and boldly identified, e.g. Contractor inserted underlining, highlighting, bracketing, and written identifications, for all Manufacturer approved Project specific requirements; where specific submitted data is not entirely related to Project requirements. Data not properly identified may be returned for re-submittal.
  2. Contract Variance: Distinguish Project data from work which vary from Contract requirements. In addition to highlight, indicate by written text "contract variance" or similar bold text that clearly defines which items vary from Contract requirements.
  3. Successfully Reviewed Unmarked Data: Where Contractor submits general data that does not clearly and boldly distinguish Manufacturer approved Project specific data and where any such data has been successfully reviewed by Consultants; then the following applies.
    - a. Contractor's submittal of data contains the Manufacturer approved Project specific requirements.
    - b. Contractor and the specific Entity or Entities responsible for the Work indicated somewhere in any such undistinguished submittals has verified from the Manufacturer specific Project requirements and clearly understands which Manufacturer's requirements are to be implemented in order to comply with the Contract intent.
- D. Consultant's Review:
1. Contractor's Responsibility: From time to time, the Consultants may include review information is provided solely to assist the Contractor as part of the review process. The Consultants makes no claim to the accuracy of information provided, nor is it to be construed as an infringement of what is the Contractor's responsibility as defined by the Conditions of the Contract. The Contractor is solely responsible for all construction means, methods, techniques, sequences and procedures, and therefore shall be responsible for determining the

- accuracy of such information provided by the Consultants and for the use in the Work.
2. Review of Component vs. Complete Assembly: Consultant's review of single component of a larger assembly does not constitute his approval of the entire assembly, unless otherwise indicated.
  3. Piecemeal Submittals: Do not purchase, fabricate, and manufacture any product for which Consultants has not completed successful review of all required submittals for any product. Contractor assumes risk, e.g. additional costs for compliance with Design Intent, e.g. costs for purchase, manufacture, fabrication, installation, and replacement of non-complying work, costs for Contract time impacts, etc., as a result of beginning any work where Consultant's successful review of all submittals has not been accomplished.
  4. Contractor's Questionable Review: Consultants will reject submittals not reviewed by Contractor; even when stamped.

## **PART 2 - PRODUCTS (Not Used)**

## **PART 3 - EXECUTION**

### 3.01 SUBMITTAL FORMAT:

- A. Submittal Sets: Number of submittals refers to submittal sets. Each submittal set includes all unique documents (not copies of) required for a particular submittal and are assembled together into a single unique and related group for submission.
- B. Contractor Transmittal of Each Submittal Set: Included following minimum information.
  1. Contractor letterhead, company name, address, phone/fax numbers, with responsible person sending submittal with his printed name and signature.
  2. Installer, Supplier, and Manufacturer company name, contact persons, addresses, phone/fax numbers.
  3. Addressee information.
  4. Numbering System: Unless otherwise approved by Consultants, the following system to be used; appended to all submitted documents and not just the cover sheet.
    - a. Initial Submittal: Specification Section Number followed by a sequence number, e.g. 08110-001.
    - b. Resubmissions: Specification Section Number followed by an R, applicable previous sequence number to relate it back to the original initial submission and an extension number to show further sequencing, e.g. 08110-R-001.01.
  5. Append applicable numbering system to all documents.
  6. Date.

7. Impacted Specification Section numbers; with applicable paragraph references.
  8. List of submittals.
- C. Origination Transmittal: Submit copy of Entity originating submitted information to Contractor.
- D. Submittal Sets: Submit not less than following to each entity; for every submittal required; unless otherwise specified.
1. Printed, Written, or Published Data: Digital Format: Portable Document Format or PDF. Provide one (1) reproducible set submitted through email. Upon approval provide (4) sets for Owner and Consultants; consisting of not less than one (1) original publications; other sets shall be clean and clear photocopies of the originals.
  2. Drawings: For Shop Drawings and other similar drafted type work, submit following.
    - a. Digital Format: Portable Document Format or PDF: Provide one (1) reproducible set submitted through email. Upon approval provide (4) sets for Owner and Consultants; consisting of not less than one (1) original publications; other sets shall be clean and clear photocopies of the originals.
    - b. As-Builts: Portable Document Format or PDF: Provide one (1) reproducible set submitted through email. Upon approval provide (4) sets for Owner and Consultants; consisting of not less than one (1) original publications; other sets shall be clean and clear photocopies of the originals. Also provide AutoCAD drawing files.
  3. Samples:
    - a. Type: Same materials and finishes scheduled for Project.
    - b. Sizes: Not less than following sizes; unless otherwise specified or acceptable to Consultants.
      1. Board and Sheet Type Samples: Actual thickness x 8-1/2 x 11"
      2. Running Samples: Profile x 11-1/2" lengths.
      3. Other: As acceptable to the Consultants.
    - c. Number of Submittal Sets: Same as required for "Printed, Written, or Published Data".
- E. Contractor's Review Stamp: Stamp each document. Date and sign each stamp. Stamp to include text that confirms submitted documents fully reviewed by Contractor for compliance with Contract intent.

### 3.02 ADMINISTRATION SUBMITTALS:

- A. General: Refer to individual Sections for specific requirements.

3.03 WORK RELATED SUBMITTALS:

- A. Product Data: Submit all standard publications available and applicable to Project requirements, including but not limited to, generic material data, installation instructions, tested characteristics, MSDS sheets, standard detail drawings, and color charts. Where standard data not complete, submit other written recommendations necessary to assure that Project data is complete.
- B. Shop Drawings:
  - 1. Types: Include plans, elevations, sections, and details.
  - 2. Scale: Similar to or larger than similar drawn elements on Contract Drawings.
  - 3. References: Same as Consultants; where different than Consultant's method must set up a referencing system so Consultants can readily find relationship to his similarly drawn elements.
  - 4. Level of Detail: As required for proper fabrication and installation of the work. Show relationship and interface to adjacent work.
- C. Samples:
  - 1. Initial Selections: May be made from charts and photographs that accurately depict products; when acceptable to Consultants. If in opinion such replications are not accurate enough, submit actual samples in full range of available characteristics.
  - 2. Final Samples: Actual Project representative materials and finishes selected by Consultants for Project.
  - 3. Colors, Finishes, Textures, Patterns: Where not specified, verify prior to submission of Bid; otherwise provide full range of available standards from Manufacturer for selection by Consultants.
  - 4. Options: Where not specified, verify prior to submission of Bid; otherwise provide full range of options available from Manufacturer for selection by Consultants.

3.04 QUALITY ASSURANCE SUBMITTALS:

- A. General: Refer to specific paragraphs, e.g. "Quality Assurance", "Field Quality Control" and other paragraphs, in individual Specification Sections for specific requirements.

3.05 CLOSEOUT SUBMITTALS:

- A. General: Refer to paragraphs, e.g. "Submittals", "Warranty", "Maintenance", "Owners Instructions" and other paragraphs, in individual Specification Sections for specific requirements.

END OF SECTION

## SECTION 01400 - QUALITY REQUIREMENTS

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Quality assurance and control of installation.
  - 2. References.
  - 3. Inspection and testing laboratory services.
  - 4. Special inspections.
  - 5. Manufacturers' field services and reports.
- B. Related Sections.
  - 1. "Section 01330 - Submittal Procedures": Submission of Manufacturers' Instructions and Certificates.
  - 2. "Section 01600 - Product Requirements": Requirements for material and product quality.

#### 1.02 QUALITY ASSURANCE/CONTROL OF INSTALLATION:

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

#### 1.03 REFERENCES:

- A. Conform to reference standard by date of issue current on date for receiving bids.
- B. Obtain copies of standards when required by Contract Documents.

- C. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.04 INSPECTION AND TESTING LABORATORY SERVICES:

- A. When the individual specifications sections require it, the Contractor shall appoint, employ, and pay for services of an independent firm to perform inspection and testing. Seismic testing will need to be performed by a special inspector. Contractor to coordinate inspection, but Leahi will pay for said inspection directly.
- B. Services will be performed in accordance with requirements of governing authorities and with specified standards.
- C. Reports will be submitted by the independent firm to the Engineer, in duplicate, indicating observations and results of tests and indicating compliance or non compliance with Contract Documents.
- D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
  - 1. Notify the Project Engineer and independent firm 24 hours prior to expected time for operations requiring services.
  - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.
- E. Retesting required because of non conformance to specified requirements shall be performed by the same independent firm on instructions by the Project Engineer and shall be paid by the Contractor.

1.05 SPECIAL INSPECTIONS:

- A. Owner will employ Special Inspectors acceptable to Honolulu County to perform inspections on various elements of the work as required by the Building Code as locally adopted. During the course of the work under inspection, each Special Inspector will submit detailed reports relative to progress and conditions of the work including deviations from specified requirements and stipulating dates, times, and locations. Special inspector will submit a final report to the County. Contractor must cooperate fully with the Special Inspectors.

1.06 MANUFACTURERS' FIELD SERVICES AND REPORTS:

- A. Submit qualifications of observer to the Owner Representative 30 days in advance of required observations. Observer subject to approval of the Project Engineer and the Owner.

- B. When specified in individual specification Sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start up of equipment, or to test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.
- C. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. Submit two (2) copies of report written by representative, both to the Owner and to the Project Engineer listing observations and recommendations, within ten days of observation.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION (Not Used)**

END OF SECTION

## SECTION 01420 - REFERENCES

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Use of Standards.
  - 2. Abbreviation use and format
- B. Related Sections.
  - 1. Division 1 Sections.
  - 2. Divisions 15 and 16.

#### 1.02 REFERENCES:

- A. Standards:
  - 1. Requirement: Each type of work provided for this Project is required to comply with recognized Industry standards (also may be referred to as “references”) that are applicable to the class of work intended by the Contract Documents. Compliance is required whether such standards are indicated or not and whether such standards are in published form or an unwritten but accepted practice in the Industry for the class of work.
  - 2. Use:
    - a. General: Where a specific standard is indicated, the most current standard is intended and this is to be interpreted as a method for conveying the design intent and its use expands on or clarifies the requirements and its use is not intended to apply to the class of work to be provided.
    - b. Conflict: Where several Industry standards apply to the Work, and where quality requirements of these applicable standards conflict for the class of work required, it is intended that the standard producing the higher quality work is to apply.
    - c. Out-of-Date: Where any specified standard is not current, one of following may be provided.
      - 1) Provide work complying with non-current standard; except where older standards are not compliant with any Code requirements, then provide work complying with standard; but modified to extent as necessary to comply with applicable Codes.
      - 2) Provide work complying with non-current standard; except where older standards are not compliant with any Code requirements, then provide work complying with standard; but modified to extent as necessary to comply with applicable Codes.

- 3) Provide work complying with current standard that is the equivalent of the non-current standard or higher quality standard which is closest equivalent.
- B. Abbreviations and Acronyms:
1. Industry Related: Industry accepted abbreviations and acronyms are used throughout the Contract Documents. If any is not understood, these should be verified from the Consultants; prior to Bid.
  2. Product Identification Format: Where used in Contract Documents the following format is used.
    - a. Format: Abbreviation of one or several letters, followed by a hyphen, followed by an identification number, e.g. WD-1 for wood type number one or WPM-1 for waterproof membrane type number one.
    - b. Number Sequence and Related Sections: Designations may be used between related specification sections where primary product is similar and therefore numbers are not necessarily sequential within a specific specification section, although the numbering will be sequential between all related sections where similar designations are used.

### 1.03 DEFINITIONS:

- A. Related Sections: The listed specification sections under the “Related Sections” paragraphs indicates some of the primary related work which is impacted by the work of the specific specification section in which the list appears. It is not intended as a complete list (which in many cases would otherwise be enormous) but has been provided to assist the Contractor.
- B. Exposure Definitions: Unless otherwise redefined elsewhere, the following applies.
1. Exterior Surfaces: Exposed on the outside envelope of structure or surfaces of other constructed elements and equipment which are exposed and not fully enclosed by walls, floors, roofs, windows, and doors, are to be considered as part of the exterior and surfaces occurring in such spaces are to be considered exterior surfaces. Naturally vented, but enclosed, attic or similar spaces to be included.
  2. Interior Surfaces: Surfaces interior to the fully enclosed envelope of a structure or within the fully enclosed envelope of other constructed elements and equipment. These surfaces are not exposed to the “outside air”.
  3. Exposed: Surfaces which are exposed to view from most vantage points, which are not concealed from view due to permanent inaccessible construction or earth, and which is not defined as semi-exposed.
  4. Semi-Exposed: Surfaces not readily visible but are accessible and viewable from selected vantage points. These surfaces include those hidden by and hidden on removable or openable doors,

- panels, and drawers, and surfaces or undersides of shelves, counters, desks, and toe spaces, surfaces, which are hidden by moveable equipment/furnishings, and other similar surfaces.
5. Concealed: Surfaces not exposed to view from any vantage point and which is concealed by permanent inaccessible construction, earth, and equipment/furnishings. Such concealed surfaces include those surfaces permanently concealed within walls, above ceilings, within floor construction, within shafts, and those buried underground in earth. Include within this definition, surfaces above otherwise semi-exposed accessible suspended acoustical ceilings, if any.
- C. Type: Word “type” as used herein is defined to mean any characteristic, e.g. shape, size, finish, pattern, texture, color, sheen, of a product that may be different from another similar product.
- D. Defect: Word “defect” as used herein is anything that would make a product less in quality than would be expected of the product at anytime from its time of manufacture to the end of its useful installed life; when normal wear and tear and abnormal impacts, e.g. Acts of God or other impacts for which the product was not designed or engineered for are taken into consideration; except to the extent such abnormal impacts may otherwise be warranted by the Manufacturer by published statements, verbal promises, and written Warrantees.
- E. Wet and or both Humid Interiors:
1. General: Refers to interior areas or rooms that are exposed to higher wet and or both humid conditions, e.g. swimming pools, steam rooms, saunas, bathrooms, showers, restrooms, commercial kitchens, locker rooms with showers or similar gang type wet fixtures, Janitor’s rooms with sinks, etc.; when compared to typical conditioned areas or rooms of a building. Open areas or rooms immediately adjacent to such areas or rooms are included; where exposed to potential effects of such conditions.
  2. Exposed Wet and or both Humid Conditions: Surfaces directly adjacent to and enclosing equipment and or both fixtures producing wet and or both humid conditions, e.g. walls and ceilings directly adjacent to a tub.
  3. Indirectly Exposed Wet and or both Humid Conditions: Surfaces part of area or room directly outside of enclosed or partially enclosed area or room producing wet and or both humid conditions, e.g. surfaces just beyond enclosure of a tub.

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION (Not Used)**

END OF SECTION

## SECTION 01450 - QUALITY CONTROL

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Quality control testing and inspection requirements.
- B. Related Sections.
  - 1. Division 1 Sections.

#### 1.02 SUBMITTALS:

- A. From Testing-Inspection Service: Submit Testing-Inspection Reports directly to Consultants.
- B. From Contractor: Schedule each testing-inspection required in Progress Schedules.
- C. Quality Assurance Submittals: Refer to "Quality Assurance" paragraphs herein.
- D. Special Inspector Qualifications.

#### 1.03 QUALITY ASSURANCE:

- A. Testing Owner Requires: In addition to any Authority required and specified testing, Owner reserves right to test and inspect any and all work of Project.
- B. Securing of Testing-Inspection Services:
  - 1. Contractor:
    - a. Responsibility: For Authority required and specified testing, secure a Testing-Inspection Service and pay for testing required.
    - b. Owner Approval: Secure Owner's acceptance of Contractor's selected Testing-Inspection Service, prior to signing any Contract for any required services. Submit proposed Testing-Inspection Service qualifications for review in timely manner. Do not use any Testing - Inspection Service not acceptable to Owner.
  - 2. Other Testing: Except for Authority required and specified testing, Owner to secure his own Testing-Inspection Service and pay for any other testing he may require.

## **PART 2 - PRODUCTS (Not Used)**

## **PART 3 - EXECUTION**

### **3.01 INSPECTIONS-TESTING, GENERAL:**

- A. General: Comply with requirements of the General Conditions of the Contract and requirements specified herein. Use of any testing inspection service shall in no way relieve Contractor of his obligation to perform the Work in accordance with the Contract.
- B. Contractor shall retain any required special inspector and special inspection requirements as required by Honolulu County Department of Planning and Permitting.

### **3.02 LABORATORY & INSPECTOR DUTIES:**

- A. Performance of Service: Perform required inspections, sampling, and testing of materials and methods of construction. Ascertain compliance with requirements of Contract Documents as measured by standards required by specifications, by Authorities, and by recognized ASTM and other acceptable Industry standards applicable to each tested work.
- B. Notifications: Promptly notify Consultants of irregularities or deficiencies of the inspected and/or tested Work. Submit test reports for review.

### **3.03 CONTRACTOR'S RESPONSIBILITIES:**

- A. Contractor Notifications: Notify each Testing-Inspection Service each time required and within time period requested by Service; to allow them to properly preparation for and schedule each type testing-inspection required.
- B. Cooperation: Cooperate with testing service personnel. Provide appropriate access to work where inspections, sampling and testing required. Furnish causal labor as necessary to assist access to work to be tested, to assist in obtaining and handling of samples at the site, and to otherwise facilitate the inspection and testing process.
- C. Protection and Repair: Protect each work being tested-inspected from anything that would invalidate the testing-inspection results and for duration of each testing-inspection period. Upon completion of inspection, testing, and sampling, repair damaged work and restore finishes to match the adjacent finishes.
- D. Contractor Arranged Tests: Contractor may arrange and pay for additional inspections, sampling, special inspection, and testing beyond the required testing from Testing-Inspection Service.

- E. Non-complying Work: Where non-complying work is evidenced by Testing-Inspection Service, Contractor to comply with following.
1. Owner's Costs Directly Attributable to Defective Work: When Owner has paid for testing, pay for all costs incurred by the Owner and the Consultants.
  2. Correction of Work: Provide all work necessary to correct defective work to comply with Contract requirements.
  3. Time Impact to Work: Request for additional time will not be considered when resulting from installation of defective work.

END OF SECTION

## SECTION 01500 - TEMPORARY FACILITIES AND QUALITY CONTROLS

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Requirements for construction facilities and temporary controls.
- B. Related Sections.
  - 1. Division 1 Sections.

#### 1.02 SUBMITTALS:

- A. Reports and Permits.
  - 1. During Progress of Work: Submit copies of reports and permits required by governing authorities.
  - 2. Closeout Submittals: Refer to "Section 01785 - Project Record Documents".
- B. Quality Assurance Submittals: Refer to "Quality Assurance" paragraphs herein.

#### 1.03 QUALITY ASSURANCE:

- A. Standards: In addition to applicable codes and other Authority requirements, comply with applicable requirements of following.
  - 1. ANSI A10.6.
  - 2. ASHRAE 62.1 and 170
  - 3. NECA, including "Temporary Electrical Facilities.
  - 4. NFPA 70 and 241.
  - 5. NEMA.
  - 6. OSHA.
  - 7. UL.
- B. Use Charges: No additional cost or use charges for temporary facilities or services are chargeable to Owner, unless otherwise agreed to by Owner.
- C. Use Charges:
  - 1. Intent: Include all use charges for temporary facilities and services in Contract Sum.
  - 2. Utilities: Arrange with Utility Companies e.g., sewer, water, power, telephone, etc., for methods necessary for use of services so it is directly chargeable to Contractor during Contract Period. Pay for services.
  - 3. Owner Incidental Use: Allow incidental use of services (without charge) by Owner, Consultants, governing Agencies, and any of

- their designated entities, agents, and personnel that require access to the Project Site.
4. Exception: Long distance telephone charges may be billed directly to Entities responsible for persons making such calls. Owner, Consultants, and governing Agencies are not responsible for any long distance calls made by any other Entity, even where such Entities responsible for such calls are under contract to any of them.
- D. Permits: Secure permits required to carry out the Work.
- E. Regulations:
1. General: Comply with Authorities having jurisdiction over Project.
  2. Community Rules: Refer to "Section 01100 - Summary of Work".
  3. Safety: Temporary work to comply with OSHA as applicable to each Trade.
- F. Pollution Related Submittals:
1. Conditions of Use: Generally any legal toxic, hazardous, or noxious operations, equipment, and materials may be used on the Project when used in strict accordance with the law, except Consultant reserves the right to deny use of any such operations, equipment, and materials where in its opinion the use of such operations, equipment and materials may negatively impact personnel or surrounding community.
  2. Submittal: Submit a list of such operations, equipment, and materials, their intended scheduled time of use, and related product data and MSDS sheets prior to expending any moneys for such operations, equipment, and materials; for approval by Consultants.
  3. Progress Schedule: Incorporate pollution related operations into Progress Schedules when directed by Consultants.
  4. Costs: Where use of any pollution creating operations, equipment, and materials are denied by Consultants and for which there are no prior approval by Consultants prior to spending any moneys for such operations, equipment, and materials, then expended costs and any additional costs which may result from implementing Consultant acceptance alternative means for accomplishing the Work in accordance with Contract requirements are to be borne solely by Contractor.
- G. Owner and Consultant's Use: Unless not possible or where unreasonable, allow general incidental use of available facilities, e.g., conference or desk space, telephones (except for long distance), sanitary facilities, etc., by Owner, the Owner Representatives, and their personnel and designated guests.

## **PART 2 - PRODUCTS**

### 2.01 MATERIALS AND EQUIPMENT:

- A. Quality, Maintenance, Suitability: Used materials and equipment that are undamaged and in serviceable condition may be used. Provide appropriate maintenance schedule to ensure materials and equipment properly perform during time of service required. Provide only material and equipment suitable for the intended use.

### 2.02 TEMPORARY SERVICES:

- A. General: Provide equipment and materials from each Utility Company connections as required for the Work.
- B. Telephones: Each Entity to pay for their own telephones and services as they may require for the Work.

### 2.03 TEMPORARY CONSTRUCTION & SUPPORT FACILITIES:

- A. General: Provide as required for the Work.
- B. Field Offices-Contractor: Provide trailers or other enclosed facilities required by Contractor for his work. In addition to Contractor's facilities, provide following enclosed and furnished facilities which may be a part of Contractor's facilities.
  - 1. Furnished conference room for Project meetings; air conditioned and large enough to hold large meetings up to 20 people minimum.
  - 2. Work area for review of Project record documents; air conditioned.
  - 3. Dedicated storage area for approved Project samples.
  - 4. Dedicated shelved area for codes, standards, and references applicable to specified Project requirements; including applicable UBC Code, set of ASTM Building standards, and ACI standards.
  - 5. Extra supply of hardhats for visitors.
- C. Sanitary Facilities: Provide facilities as required by Contractor for the Work. If portable units are provided, provide types in accordance with Health Authorities. Maintain on reasonable and regular sanitary maintenance schedule, e.g., waste removal, cleaning and supplies.
- D. Temporary Controls: Provide materials, equipment, and facilities necessary to properly implement temporary controls specified herein.
- E. Waste/Refuse Removal: Provide necessary equipment for waste and refuse removal from the Project site.
- F. Temporary Use of Elevators: Verify temporary use of elevators for Work and included impacts in Bid; if not fully restricted, comply with following, prior to signing Contract for the Work.

### **PART 3 - EXECUTION**

#### **3.01 PROCEDURAL REQUIREMENTS:**

- A. **General:** Provide each temporary facility and utility ready for use at each location when it is first needed, to avoid delay in performance of the work. Provide facilities that can be properly maintained throughout their use at the Project site. Adjust service capacity of temporary services and facilities as needed throughout the progress of the Work. Do not remove until services or facilities are no longer required.
- B. **Inspections and Testing:** Inspect and test each service before placing temporary services in use.
- C. **Conditions of Use:** Operate temporary services and facilities in a safe and efficient manner. Do not overload temporary services or facilities, and do not permit them to interfere with the progress of the work. Do not allow unsanitary conditions, public nuisances, or hazardous conditions to develop or persist on the site.

#### **3.02 TEMPORARY CONTROLS:**

- A. **General:**
  - 1. Restrict the Work, e.g., deliveries, staging, other operations, materials and facilities, to immediate limits of Site; unless further restricted by other Contract requirements or unless otherwise approved by Owner.
  - 2. Maintain temporary controls whenever required and for periods as long as necessary to control conditions for which temporary controls are required during the Contract Period.
- B. **Protection and Security Facilities:** Provide temporary protective structures, including enclosures, supports, barricades, partitions, warning signs, warning lights, and other forms of protection as created by ongoing operations and required by working areas and conditions, including , but not necessarily limited to, the following:
  - 1. To protect all persons and property from hazards on ongoing operations.
  - 2. To provide security from access by unauthorized persons.
  - 3. To protect exposed work from damage from the weather.
  - 4. To efficiently route vehicular and pedestrian traffic around obstructing.
- C. **Fire Protection Requirements:** If any Project areas are secured, maintain security and exist requirements in compliance with Authorities. Provide portable fire extinguishers, if required, by Authorities. Instruct all

personnel on use of fire extinguishing equipment and exiting procedures prior to start of Work.

- D. Construction Cleaning: Comply with requirements specified in “Section 01740 - Cleaning”.
- E. Waste Disposal: Dispose of all waste material in a legal manner off site. Do not burn or bury any wastes on Project site. Do not dispose of any wastes into the storm or sanitary sewers.
- F. Pollution Controls:
  - 1. Intent: Limit pollution and any possible resulting contamination of the site and surrounding areas to avoid creating hazardous or unreasonable nuisance conditions from the ongoing operations.
  - 2. Authority Requirements: Comply with applicable requirements of following. Secure permits from Authorities having jurisdiction over the Project; as required by law or provided for protection of Contractor.
    - a. Federal Government.
    - b. State Government, including State Department of Health and its “Public Health Regulations”.
    - c. City Government.
  - 3. Types of Controls: Include, but not be limited to, the following.
    - a. Dust Control: Use appropriate containment methods as required to limit dust contamination of any built project structures and surrounding community.
    - b. Noise Control: Minimize noise produced by ongoing operations. Secure and pay for “Community Noise Permit” as required by the State of Hawaii Health Department.
    - c. Light Pollution: If any, night operations are required.
    - d. Air Pollution: Limit mist, smoke, vapor, gases, odorous substances, particulate matter, and other similar pollutants to acceptable levels.
    - e. Chemical Control: Limit use of hazardous and toxic chemicals in strict accordance with lawful regulations and Authorities. Prevent contamination by chemicals to the environment. Prevent nuisance conditions which could arise from use of the chemicals.
    - f. Hazardous Waste Disposal: Volatile, toxic, and other hazardous wastes are to be removed daily, except as otherwise allowed and accepted by Authorities having jurisdiction over the Project. Refer to “Waste Disposal” paragraphs herein for additional requirements.
- G. People Controls:
  - 1. Owner Restrictions: Comply with Owner’s restrictions for personnel doing business on Site.
  - 2. Contractor Controls: Provide safety measures and programs as required by law and required for protection of those on Site.

- H. Vehicle Controls:
1. Access to Site: Verify acceptance routes of access to Site.
  2. Public Road Blockage:
    - a. Intent: Avoid blocking to greatest extent possible.
    - b. Full Blockage: No work to fully block passage around such work for more than 5 minutes; regardless of alternate routes; unless such blockage has been approved by Authorities.
    - c. Partial Blockage: Minimize length of time required.
    - d. Controls: Erect temporary traffic safety devices, e.g. signs, cones, personnel directing traffic, etc. as mandated by Authorities and as required to ensure passage of public safely around ongoing operations.
  3. Site Entry: Designate specific Project Site entries. No crossing curbs and sidewalks.
  4. Speed: Maintain reasonable and safe speed limits on Site. Outside of Site, comply with Authority posted speed limits.
  5. Parking:
    - a. On Site:
      - 1) Designate parking areas and controls.
      - 2) No parking on and driving over built structures, e.g., paved driveways, walks, slabs; unless no other means or paths are available and then only as acceptable to Consultants.
    - b. Off Site: Parking off Site, if required, is to be done legally and in manner not to become a nuisance to surrounding community.
  6. Spillage: Vehicles to fully contain materials being transported. Where materials are dropped on public ways and properties, full and immediate removal is required.
  7. Mud Tracking: Any mud tracking onto public ways to be removed on daily basis by washing. Removal of waste water to conform to what is allowed by Authorities.
  8. Maintenance: Maintenance and fueling to be done only in Contractor designated areas. Set up safety program for use of such areas.
  9. Washing of Equipment: Hopper, chute, and wheel cleaning allowed as long as washing operations not detrimental to Site and ongoing operations.

### 3.03 PROCEDURAL REQUIREMENTS - UNKNOWN HISTORICAL SITES:

- A. Encounter: If any, unknown Sites are encountered, stop operations around the immediate area. Erect temporary barriers to prevent other operations from further damaging and disturbing each such Site.
- B. After Encounter:
1. Notification: Immediately notify Consultants, Owner, Authorities, and Organizations to determine extent and limits of barricades to erect.

- Where conflict occurs between Parties determining limits of barricades, Owner will prevail in determination of barricade limits.
2. Operations: Continue around barricade limits, unless otherwise directed by Consultants.
- C. Cost Impacts: Prior to signing Contract for the Work, work out a method for cost adjustments to the Contract with the Owner based upon potential effects, e.g., scope and length of delays, degree of work stoppage, scheduling, etc., to the contract due to discovery of such unknown sites; otherwise contract Sum is assumed to include all Contractor's costs for conducting his Work; regardless of scope and length of delays to his operations, is such discoveries are made.

#### 3.04 INSTALLATION:

- A. General: Use qualified Tradesmen for installation of temporary services and facilities. Locate temporary services and facilities where they will serve the entire Project adequately and result in minimum interference with the performance of the Work. Adjust services and facilities as required during the course of work so as to accommodate the entire work of the Project.

#### 3.05 OPERATIONS:

- A. General: Establish regular programs for personnel health, safety, fire protection, security, maintenance, and cleaning of Project site and temporary facilities.
- B. Supervision: Enforce strict discipline in use of temporary services and facilities at the site. Limit availability of temporary services and facilities to essential and intended uses to minimize waste and abuse. Do not permit temporary installation to be abused or endangered. Do not allow hazardous, dangerous, or unsanitary conditions to develop or persist on the Project site.
- C. Maintenance: Operate and maintain temporary services and facilities in good operating condition throughout the time of use and until removal is authorized. Protect from damage by dust, rain, and similar elements.
- D. Termination and Removal: Upon completion of each activity remove all unnecessary equipment, materials, and facilities. Upon completion of work remove all equipment, materials, and facilities and remove from site in expeditious manner. Re-establish work areas to clean condition. Repair, restore, or replace any damaged work. Completely clean site of evidence of Contractor's operations.

3.06 DAMAGES:

- A. General: If any damages, e.g., soiling staining, broken elements, damaged landscape, etc., result from Contractor's operations, such damages are to be restored or replaced to "as new" Contract conditions as satisfactory to Consultants. The costs of such remedies shall be borne entirely by the Contractor.

END OF SECTION

## SECTION 01600 - PRODUCT REQUIREMENTS

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. General requirements for products.
- B. Related Sections.
  - 1. Division 1 Sections.

#### 1.02 DEFINITIONS:

- A. Primary Products: For any given product related Specification Section, the main product of products required for the Project; which is the reason such Specification Section is written.
- B. Related Products: Products required to complete each installation of a primary product.
- C. Defects: Anything about any Project product that would make it less in quality than the intended Contract requirements, e.g., materials not complying with Contract requirements, manufacturing defects, installation defects, damages prior to Contract conclusion, abnormal deterioration, etc., that occur prior to end of any warranties in effect and prior to a reasonable expected life cycle under similar installation conditions and exposures.
- D. Exposures: Refer to "Section 01420 - References" for definitions of exterior", "interior", "exposed", "semi-exposed", and "concealed"; except as otherwise specified.

#### 1.03 SYSTEM DESCRIPTION:

- A. Performance:
  - 1. General: Each product provided shall perform to the Contract requirements under the anticipated conditions of use and installation or exceed such requirements. Performance evaluation of any product to include the performance of the product by itself and its performance relative to the total assembly for which it is a part as exposed to actual installed Project environmental and use conditions.
  - 2. Authority Requirements: Whether specified or not, each Project product to meet all Codes, laws, and other Authority applicable requirements that apply to each product. For any particular product, where specifications does not address any Project applicable Authority requirement, include in Bid Manufacturer's Code compliant

product; which is comparable to original product and that does not jeopardize original Project design intent specified for any such product. Secure Consultant's approval of product; before purchase, fabrication, and installation of such products.

#### 1.04 SUBMITTALS

- A. List of Products: As a condition to securing the Contract for the Work, submit a list of primary products to be used for the Work, prior to signing the signing of the Contract for the Work. Secure the Consultant's general approval of the listed products. List products under each related Specification number. List of Products to indicate product, Manufacturer, Installer, and Supplier.
- B. Work Related Submittals:
  - 1. Specified: Refer to other related Sections as follows.
    - a. "Section 01330 - Submittal Procedures".
    - b. "Section 01785 - Project Record Documents".
    - c. Individual Specification Sections applicable to each Entity.
  - 2. Unspecified: Including substitutions, submit any and all documentation required by Consultants in order to determine compliance with intent of Project.
- C. Closeout Submittals: Refer to "Warranty" and "Maintenance" paragraphs herein.

#### 1.05 QUALITY ASSURANCE

- A. Intent of Section: Requirements specified herein are minimum quality standards that apply to all products required for Project; whether requirements are specified or not and are to be complied with unless otherwise acceptable to Consultants.
- B. Manufacturer, Supplier, Fabricator, Installer Qualifications:
  - 1. General Qualifications: Notify Consultants where any of following qualifications cannot be met.
    - a. The Manufacturer best understands the performances of Its' products relative to Project's requirements.
    - b. Those working with any Project products, e.g. Installer and Fabricator, has secured proper Manufacturer training to professionally fabricate and install their products in accordance with Manufacturer's Project specific design intent.
    - c. Those working with any Project products, e.g. Installer and Fabricator, has fully disclosed and secured written confirmation of specific Project requirements for each Manufacturer's product from reliable and knowledgeable Manufacturer's Technical Representatives; prior to Bid and has incorporated such requirements into Bid.

- d. Those working with any Project products, e.g. Installer and Fabricator, have an intimate knowledge of all the available characteristics and options necessary to provide a complete installation in accordance with Contract design intent.
- 2 Experience: Except as otherwise indicated, as follows.
  - a. Type: Current and continuous experience with the specific Project required products and services being provided or equivalent experience acceptable to Product Manufacturer and Consultants.
  - b. Number of Years: Not less than following.
    - 1) Manufacturer: 10.
    - 2) Supplier: 5.
    - 3) Fabricator: 10.
    - 4) Installer: 5.
- 3. Certification:
  - a. Requirement: Where Manufacturer has a certification or licensing program for installation of Project products, Installer to possess current certification or licensing. Certification to have been attained not less than two year prior to time that Project was Bid.
  - b. Submittal: Submit written documentation of such certification when specified or requested by Consultants.
- 4. Verification of Project Requirements:
  - a. Condition of the Contract: It is the responsibility of the Installer and Fabricator of each work to verify that each Manufacturer's product can meet the specified and drawn Project requirements applicable to the Work; including each Manufacturer's Project related requirements and Industry practices and standards. Verify requirements and Industry practices and standards. Verify requirements during Bidding and prior to signing the Contract for the Work by the Contractor.
  - b. Impact: Where Consultants and Owner has not been notified prior to the signing of the Contract for the Work by the Contractor, Entities responsible for such work, including Contractor, are required to provide work necessary to comply with specified requirements at no additional cost to Owner.
- C. Fire Rated Assemblies:
  - 1. Intent: Provide each installed assembly to exactly match each required Product Manufacturer's tested fire assembly applicable to Project fire rating condition.
  - 2. Alteration: "Engineering Judgments" or other alterations of Manufacturer's fire tested assemblies are not allowed; unless specifically specified or acceptable to Consultants.
- D. Related Products:
  - 1. Intent: Each related product required to complete the installation of a primary Project product and having a performance related impact

on a specific Project product to be approved in writing by the Manufacturer for the primary Project product for use on the Project and for each scheduled type of use on Project; whether provided by them or not.

2. Conflict: Where specified requirements are detrimental to performances and not acceptable to any Manufacturer, notify Consultants for resolution of such conflict; prior to purchase, fabrication, and manufacture of such products.
- E. Manufacturer's Packaging and Labels:
1. General: Keep intact and unopened until just prior to each installation. Packaging may be opened when required by Manufacturer to protect products from damages due to environmental conditions, e.g. condensation, humidity, etc., and only to extent as required by them. When required, maintain protections of products.
  2. Label Descriptions: Labels to identify Project products. Specified special performances and Authority required information to appear on labels.

#### 1.06 WARRANTY:

- A. Contractor's Project Warranty: Refer to General and Supplementary Conditions of the Contract.
- B. Manufacturer's Standard Warrantees: Whether specified or not, submit standard available warrantees for primary Project products. All products to have not less than a one (1) year warranty from the Manufacturer against manufacturing defects in materials and its workmanship.
- C. Installer's Warrantees: Whether specified or not, submit each Installer's one (1) year Warranty against defects occurring due to installation of materials and its workmanship; except where any required Special Warrantees extend Installer's One Year Warranty.
- D. Special Warrantees: Refer to individual Specification Sections for other warranties required for Project.

#### 1.07 MAINTENANCE:

- A. Maintenance & Servicing Instructions: Whether specified or not, submit standard published user manuals and maintenance and service instructions for Project materials and equipment. These are in addition to any similar requirements specified in other Specification Sections.

## **PART 2 - PRODUCTS**

### **2.01 PRODUCTS, GENERAL:**

- A. Primary Product: Unless otherwise specified or acceptable to Consultants, products to comply with following.
  - 1. Experience: Used 10 years minimum in projects of similar type, scope, under similar environmental conditions, and under the same installation (assembly) conditions.
  - 2. Compatibility: Compatible with related products required to complete each of its installation and compatible with each interfacing product in each assembly.
  - 3. Single Source Intent: For specified primary products in any particular Section, the indicated products are to be generally provided by a single Manufacturer; unless it is clear that specified requirements cannot be met by a single Manufacturer; then limit number of sources to fewest reasonably possible.
- B. Related Products: Refer to “Quality Assurance” paragraphs herein.
- C. Completeness: Provide all materials necessary to provide a complete and fully functional assembly to each product required for Project.
- D. Finishes of Related Products: For exposed components of related products, provide same finish as required for primary product; unless otherwise specified or acceptable to Consultants.

### **2.02 FABRICATION:**

- A. Project Measurements: Establish written documentation with Contractor coordinating measurements and tolerances required to assure that fabricated work fits final intended Project outcome. Where possible verify actual field conditions prior to final fabrication of Project units affected by field conditions.
- B. Manufacturing Products – Intent:
  - 1. General: Generally specified requirements for any product are those which can be met by standard established manufacturing practices of manufacturers producing types of products required for Project. Generally do not alter the manufacture of such products; except as specifically engineered by Manufacturer to conform their products meet required special or custom requirements to meet Contract intent.
  - 2. Customizations: When required, Manufacturer to have ten (10) years minimum experience engineering products for specific custom performances required for Project; unless otherwise acceptable to Consultants. Acclimation Sensitive Products: Where products are sensitive to environmental conditions, adjust manufacturing and

fabrication of products in manner that defects do not occur under final environmental conditions to which product is to be exposed.

2.03 SPECIAL REQUIREMENTS:

- A. Ferrous Products – General: Whether required for exterior or interior use and unless otherwise acceptable to Consultants, comply with following.
  - 1. Do not install any rusted ferrous products in the Work. If rust occurs, rust to be removed completely from surfaces without destroying functionality of product or replaced with new un-rusted and Contract complying work.
  - 2. Ferrous fasteners when used with metals are to be used only with ferrous materials.
  
- B. Galvanizing of Ferrous Metal Products: Even when not specified, and except where other galvanizing specified, ferrous metal products to be hot dipped galvanized as follows.
  - 1. Location:
    - a. When part of exterior assemblies, including vented attic spaces exposed to exterior air.
    - b. At interior when installed in or attached to concrete and masonry part of exterior wall or similar assemblies.
    - c. When occurring in with or high humidity areas, e.g., restrooms, janitor’s closets with sinks, kitchens, swimming pools, shower areas, steam rooms, saunas, etc.
  - 2. Type of Galvanizing: As applicable to assembly type, comply with following.
    - a. Standard: ASTM A 153, ASTM A 123, and ASTM A 653.
    - b. Vent Holes: If required, fully plug flush with lead after galvanizing. Blended smooth with adjacent surfaces.
  
- C. Stainless Steel: If any, to be products to be fabricated without ferrous contamination in accordance with NiDI requirements

**PART 3 - EXECUTION**

3.01 GENERAL EXECUTION REQUIREMENTS:

- A. Intent: Comply with Manufacturer’s Project specific requirements as fully submitted and successfully reviewed by Consultants; which shall not be less in quality than Contract intent and applicable Industry standards.

3.02 DELIVERY, STORAGE, & HANDLING:

- A. Delivery: Upon arrival of Site, immediately inspect products for defects. Replace defective products in timely manner; without affecting Project Progress Schedule.

- B. Storage: Comply with each Manufacturer's Project specific requirements. Ensure storage methods do not cause defects to occur. Whether storage is on site or off site, maintain insurance covering full replacement of materials.
- C. Handling: Use methods and equipment approved by each Product Manufacturer for types of handling required in Project.
- D. Protection of Products:
  - 1. Intent: Contract requirements cannot anticipate Contractor's means and methods for shipping of ferrous products where exposure conditions can rust product. Specified requirements are intended for Owner acceptance of installed undamaged and un-deteriorated, as-manufactured products at time of Substantial Completion.
  - 2. Protection Responsibility: Contactor is responsible for means and methods, including interim shipping and storage, to ensure Project products are provided with adequate protections during entire procurement and installation process; so products can be installed accordance with the intent.

### 3.03 PROJECT SITE CONDITIONS:

- A. Environmental Conditions: Do not proceed with any work under any adverse conditions that would cause defects in products.
- B. Acclimation:
  - 1. General: Acclimation interior products prior to each installation under Manufacturer recommended environmental conditions to ensure success of each installation.
  - 2. Interior Products: Install when each space fully enclosed and when temperature and humidity are in strict accordance with each Product Manufacturer's requirements.

### 3.04 SEQUENCING & SCHEDULING:

- A. Coordination: Each Installer to coordinate work with other Trades, e.g., schedules, sequence of operations, dimensions, tolerances, finish, embedded items, templates, etc., to ensure work by other Trades are constructed in manner to ensure success each of their installations.

### 3.05 EXAMINATION:

- A. Existing Conditions: Prior to start of each work, verify existing conditions for conformance with requirements necessary to ensure success of each installation. Start of work indicates acceptance of conditions and confirms its conformance.

3.06 PREPARATION

- A. Responsibility: Each Installer to verify and coordinate following responsibilities; otherwise Installer requiring preparation is required to provide required work necessary to assure success of its installation.
  - 1. Support Work.
  - 2. Substrate preparation.
  - 3. Tolerances.

3.07 INSTALLATION:

- A. General: Refer to "General Execution Requirements" paragraph herein.
- B. Finish, Color, Pattern, Texture Variation: Install products in manner to assure uniform visual appearance acceptable to the Consultants. Methods for insuring uniformity may include utilizing materials in sequence as manufactured from same lots where singular lot may be used for single contiguous area or may require the hand selection of materials between several lots for larger areas.
- C. Defective Work:
  - 1. General: Replace defective work with complying work; unless otherwise acceptable to Consultants.
  - 2. Minor Defects: Very minor damage, deterioration, and other very minor defects may be restored when acceptable to the Consultants.
  - 3. Restoration Intent: In addition to any other requirements, restoration when allowed by Consultants shall meet following minimum criteria.
    - a. After fully finished, no evidence of restoration work to be visible where on any exposed to view surfaces.
    - b. Workmanship of restoration work on concealed surfaces may be less rigorous than work for exposed to view surfaces, but to be generally flush and neat.
    - c. The existing defect and any restoration work is not to reduce the long term performance of the materials and components of the work in any way.
    - d. The method and materials used to restore any defect to be such that it can perform as well or better than the original materials.
    - e. Restoration is to be accomplished at no cost to Owner.

3.08 PROTECTION:

- A. Intent: Provide protections necessary so each work is clean, without contamination, without defects, abnormal deterioration, without damage, and properly functioning at the time of Final Acceptance by the Owner.

3.09 CLEANING:

- A. Intent: Refer to "Section 01740 - Cleaning".

END OF SECTION

## SECTION 01620 - PRODUCT OPTIONS

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Basis for options available for products.
  - 2. Substitutions proposals.
  - 3. Value engineering proposals.
- B. Related Sections.
  - 1. Division 1 Sections in general.
  - 2. "Section 01600 - Product Requirements".

#### 1.02 DEFINITIONS:

- A. Substitution Proposal: A proposal offered by the Contractor of a product(s) to be used in lieu of the specified product(s); which is generically similar to the specified product(s) and its specified requirements.
- B. Value Engineering (VE) Proposal: A proposal offered by the Contractor of a product(s) to be used in lieu of the specified product(s); which is generically different than the specified product(s) and which offers a significant advantage or advantages to the Owner relative to cost, scheduling, and/or performance; without altering the original design intent in an unacceptable way to the Consultants.
- C. Products: Use of words such as "products", "materials", "assemblies", "systems", are to be used interchangeably and unless the proposal is specifically for only a single most basic (cannot be broken down any further) material unit or material component, the proposal shall mean and be measured in terms of all the materials required for each use in the Project as a final in-place assembly or system.
- D. Material Composition: Where word "material composition" is used, this word is to mean the actual scientific makeup of the product with percentage of each material or chemicals going in to make up the final product being evaluated. Material Safety Data Sheets are to be provided when available. Words such as "100% acrylic" or "100% urethane" or other words to that effect are not acceptable when the product is not in fact only made up of that material alone.
- E. Limitations: Where word "limitations" is used in conjunction with products being evaluated in proposals, this word is to mean "anything" which could reduce or be less than any quality or any characteristic of the product as required for use in the Project at "any time" during its life expectancy,

including its “life expectancy”; when compared to the specified product, when compared with other competitive generic products of the same type, and when compared with other competitive products that basically are designed for the same functional purpose. Examples include, but are not limited to, following.

1. Incompatibility with Other Materials: Where any contracting material is deleterious to the other, e.g. electrolysis, corrosion, contamination, chemical sensitivity, bacteria or plant growth (mildew or algae growth, etc.), or any other deleterious material effects.
2. Life Expectancy: Shorter life expectancy than specified materials.
3. Weatherability: Not as weatherproof as specified product, e.g., water leakage, air leakage, ultra-violet exposure, breathability, and hydrostatic pressure effects.
4. Structural: Strength of product compared with specified material, e.g. compressive, tensile, shear, bond, peel, and durometer hardness characteristics.
5. Durability: Resilience of product compared with specified material. Its ability to withstand physical abuse and movement, e.g., impact resistance, abrasion resistance, puncture resistance, and elongation.
6. Fire Resistance: Ability to resist fire exposures.
7. Product Characteristics: Susceptibility to defects occurring due to the characteristics unique to the product, e.g., sensitivities such as those due to material composition (shelf life, curing methods, etc.), configuration, weight, size, substrate conditions, weather conditions, assembly conditions, applications methods, etc.
8. Other Characteristics: E.g., slip resistance, acoustic properties, and resistance to catastrophic events, etc.

### 1.03 SUBMITTALS:

- A. Substitution or VE Proposals: Submit complete, readable, and organized information, with all proposal data applicable to Project highlight marked. Information to include, but not necessarily be limited to, following.
  1. Substitution/VE Proposal Form: Copy of form has been inserted in Appendix. This is to be “fully” completed and complied with.
  2. Product Data:
    - a. Published Data: Submit Primary Product Manufacturer’s complete available published product data including, but not limited to, primary product descriptions, related product descriptions, color/pattern/texture charts, specifications, drawings, laboratory tested data, fabrication/installation instructions, and list of comparable Projects in Hawaii and other similar salt air/humid environments, such as Guam, Florida, or any of the Southern States bordering the Gulf of Mexico.
  3. Comparison of Products:

- a. Requirement: Submit a detailed comparison of significant generic qualities of the proposed substitution with those of the work originally specified.
  - b. Characteristics: List significant qualities including, but not necessarily limited to, following.
    - 1) Material composition.
    - 2) Sizes.
    - 3) Weight/density.
    - 4) Color, textures, patterns available.
    - 5) Qualities critical to performances.
    - 6) Limitations of product.
    - 7) How long used in locale.
    - 8) Availability in locale, by U.S. regions, and internationally.
    - 9) Market share locally, regionally, and worldwide; based upon equivalent competitive materials.
  - c. Format: Submit in a typewritten table format in which characteristics are compared side by side.
4. Samples: Submit samples. Provide additional samples or small scale mockups, if requested, by Consultants. Samples to be submitted in accordance with "Section 01330 - Submittal Procedures".
  5. Project Modifications: Where standard published drawings are not adequate, submit other drawings or legible to scale sketches to show each of following where applicable to Project.
    - a. Where Project dimensions would be affected, indicate with some typical examples how product affects Project dimensions.
    - b. Show custom modifications of product which are required for Project.
    - c. Show additional work required of other Installers which is not otherwise shown.
    - d. If any, penetrations are required through work, show how penetrations through work is to be accomplished, including any multiple penetrations.
  6. Changes to Other Work: Submit a list of written changes to the work of other Installers that would be necessary to accommodate the proposal.
  7. Cost Proposal:
    - a. During Bidding Period: Do not provide.
    - b. Post Bidding Period: Submit. Indicate the overall net change, if any, in the Contract Sum. Separately list cost of proposed Work, cost of changes to other Work, Contractor's cost, cost for Consultant's time (verified from Consultants) and other miscellaneous costs.
  8. Certifications: Sign certifications indicated on form.
  9. Format: Submit proposal form as provided in Appendix and other data requested.

1.04 QUALITY ASSURANCE:

- A. Objective: It is up to those making the proposal to prove to the Consultants that the proposed products will meet the Project requirements. To the extent that the Proposer wishes to pursue the Work, the Consultants reserve the right to request any information and samples necessary for him to make a decision.
- B. Quality of the Proposals: It is intended that the physical appearance and dimensions of the Project and the quality of the specified products required by the Contract Documents be maintained, unless otherwise specifically requested by and acceptable to Consultants. Generally, submit proposals that would result in installations of equivalent quality to that specified.
- C. Conditions for Consideration of a Proposal: The Contractor's proposal will be received and considered when extensive revisions to the Contract Documents are not required, when the proposed changes are in keeping with the primary intent of the Contract Documents, when the requests are timely, fully documented and properly submitted, and when one or more of the following conditions are satisfied.
  - 1. Where the proposal is directly related to an "or equal" or "comparable product" clause or similar language in the Contract Documents.
  - 2. Where the specified product or method cannot be provided within the Contract Time. Do not submit proposals which have resulted from the Contractor's failure to pursue the work promptly or to coordinate the various activities properly.
  - 3. Where the specified requirements cannot receive necessary approval by a governing Authority, and the requested proposal can be approved.
  - 4. Where a substantial advantage is offered by Owner, in terms of cost, time, energy conservation, or other considerations of merit, after deducting additional responsibilities may include such considerations as additional compensation to the Consultants for redesign and evaluation services, the increased cost of other work by the Owner or separate contractors, and similar considerations.
  - 5. When the specified products or methods cannot be provided in a manner which is compatible with other materials of the work, and where the Contractor certifies that the substitution will overcome the incompatibility.
  - 6. When the specified products or methods cannot be properly coordinated with other materials in the work, and where the Contractor certifies that the proposed substitution can be properly coordinated.
  - 7. When the specified products or methods cannot receive a warranty as required by the Contract Documents and where the Contractor certifies that the proposed substitution can be given the required warranty.

- D. Factors Affecting Acceptance of Proposals:
1. Review Intent: It is intended to give all responsible proposals a fair review, however, the Consultants and Owner reserves the right to deny acceptance of any proposal for any reason. Irresponsible use of proposal process may result in termination of the review process in its entirety by Consultants and Owner.
  2. During Bidding Period: Time period allotted to Consultants for review of submittals is short. It is critical full documentation be received and that documentation complies strictly with requirements specified in "Documentation" paragraphs herein.
  3. Post Bidding Period:
    - a. Value Engineering: Only when Owner has directed Consultants that value engineering proposals be considered. Consultants will determine kinds of proposals acceptable during the review process.
    - b. Post Contract: No proposals will be considered, unless significant disadvantage to Contractor or significant advantage to Owner can be shown.
  4. Documentation:
    - a. Intent, Information Access: Competitors should be fully aware of the advantages and disadvantages of their products and of their competitor's products. Should any knowledge be lacking, each competitor should be fully capable of accessing and securing accurate information. Where this is not possible, and unless the product is proprietary, these competitors should not offer proposals for this Project.
    - b. Quality of Information in Proposal: The Consultants should be able to fully and accurately evaluate the difference between the specified product(s) and the proposed product(s) from each proposal. Do not submit proposals with only a minimum amount of information, as Consultants will base his opinion on the information in the proposal only and will not reconsider any proposal that has been "not accepted" for any reason, including one that is not adequately documented in the Consultant's opinion. It is suggested that a complete and accurate "comparison chart" accompany each proposal, unless otherwise acceptable to Consultants.
    - c. Reduction of Information Provided: When acceptable to the Consultants, the extent of the submittals may be reduced when approved by Consultants prior to the submission of each proposal. Generally, these will be for obvious products which are and fall into generic categories very familiar to the Consultants. Where the Consultants agree to reduce the amount of information to be provided, the Consultants reserves the right to expand the requirement again where the Consultants feels that the proposal "objective" was not achieved.

- d. Comparison of Products: In addition to the other required submittals, the “Comparison of Products” table is a key submittal to the whole proposal and is a requisite to acceptance. This submittal is not to be deleted.
- E. As part of Work-Related Submittals: Submission of unspecified products or methods as part of “work-related” submittals does not constitute an acceptable or valid method for processing substitution or value engineering proposals. Successfully reviewed “work related” submittals does not indicate approval of unspecified products or methods.
- F. Consultant’s Requirements: Verify prior to submission of any proposal, the Consultant’s requirements necessary to fully conform proposal to Contract requirements. Request for additional costs after acceptance of any proposals will be denied.

## **PART 2 - PRODUCTS**

### 2.01 PRODUCTS THAT QUALIFY AS SUBSTITUTIONS:

- A. Commercial Usage: Same as specified product or ten (10) years minimum; under similar installation and environmental conditions specified for Project.
- B. Material Composition:
  - 1. Primary performance constituents are for all intents and purposes the same or exceed requirements with regard to chemicals and materials, their quantity, and their quality; without violating applicable patents and copyrights.
  - 2. Enhancements are acceptable; except where the enhancements become the primary reason for its performance and in such cases the product will be evaluated as a “value engineering” product.
- C. Product Construction:
  - 1. Assembly: Manufactured and assembled for all intents and purposes the same as specified product; without violating patents and copyrights.
  - 2. Size and Configuration: Similar to specified product.
- D. Performance Characteristics:
  - 1. Critical performance measures have been tested by same kind and number of tests as specified products. Critical performance measures to be those acceptable to Consultants.
  - 2. Tested performances are similar in results; as acceptable to Consultants.
- E. Manufactured Characteristics: Available range of manufactured characteristics, e.g., color, texture, pattern, finish, sizes, configuration,

customizability, etc., are not less than the specified product or will not restrict the original design intent in any way if the product is acceptable to Consultants.

- F. Manufacturer Support: Not less than required for specified product, e.g., financial capability, technical support, standard and special warranties offered, etc.

## 2.02 PRODUCTS THAT QUALIFY AS VALUE ENGINEERING PRODUCTS:

- A. General: Those that do not qualify as “Substitutions.”

## PART 3 - EXECUTION

### 3.01 PROPOSAL PROCESS:

- A. Proposals Offered During Bidding Period:
  - 1. Submission: In accordance with the “Instructions to Bidders” and its supplements.
  - 2. Acceptable Proposals: Consultants to send written notification to each eligible Bidder of acceptance of the proposal with copies of the accepted proposal. Eligible Bidders may incorporate the substitutions in accordance with the accepted proposal.
  - 3. Proposals Not Accepted: Consultants to send each proposal that are not accepted back to the Bidder who originated the proposal. Consultants to have marked the proposal “Not Accepted”. Bidder may resubmit proposal, where specified time period allowed for review of proposals is not exceeded and where resubmission is acceptable to Consultants. Refer to Consultant’s “Comments” for additional requirements suggested for compliance, if any.
- B. Post Bidding Period Proposals:
  - 1. Submission: As directed by Consultants.
  - 2. Acceptable Proposals:
    - a. Preliminary Acceptance: Where marked “Acceptable, Preliminary” on form, indicates that further information may be required before a decision is made. Comply with “Comments” on form and where not indicated a complete proposal conforming to new requirements. Adjust costs is required. Use of proposed products are not allowed until “Acceptable, Final” is marked on the proposal.
    - b. Final Acceptance: Where marked “Acceptable, Final” on form, indicate acceptance of proposals and may become basis of Contract upon execution of forms required changes in Work.
  - 3. Proposals Not Accepted: Where marked “Not Accepted”, resubmission may be allowed when Consultants indicate “Resubmission Acceptable” and resubmission will be denied when Consultants indicates “Resubmission Denied” on form. Where

remarks are indicated under “Comments”, comply with any further requests which may be indicated.

3.02 INCORPORATION:

- A. Incorporation of Proposals: Coordinate work with other affected Installers of other Work. Comply in strict accordance with accepted proposal, which should be in strict conformance Product Manufacturer’s Project specific requirements.

END OF SECTION

## SECTION 01735 - CUTTING AND PATCHING

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Cutting and patching requirements.
- B. Related Sections.
  - 1. Division 1 Sections.
  - 2. "Section 01450 - Quality Control".

#### 1.02 DEFINITIONS:

- A. "Cutting and Patching": The phrase as used herein is defined as follows.
  - 1. Cutting and patching includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and patching required restoring surface to their original condition.
  - 2. Cutting and patching is performed for coordination of the work, to uncover work for access or inspection, to obtain samples for testing, to permit alterations to be performed or for other similar purposes.
  - 3. Cutting and patching performed during the manufacture of products, or during the install fasteners and similar operations are also not considered to be "cutting and patching".
  - 4. "Demolition" is recognized as related but separate category of work, which may or may not require cutting and patching as defined in this Section. Cutting and patching work required by demolition to comply with requirements of this Specification Section.

#### 1.03 SUBMITTALS:

- A. Product Data: Submit Product Data on materials to be used in for patching work.
- B. Quality Assurance Submittals: Refer to "Quality Assurance" paragraph herein.

#### 1.04 QUALITY ASSURANCE:

- A. Scheduled Methods: Submit methods for cutting and patching of work prior to execution of any cutting and patching work.
- B. Alternate Methods: Consultants will entertain alternate methods where accomplishing original intent of cutting and patching work. Submit recommended methods for review. Do not institute alternate methods, unless successful review is secured from Consultants.

- C. Structural Work:
  - 1. General: Do not cut and patch any work in a manner that would result in a reduction of its load-carrying capacity or of its load-deflection ratio.
  - 2. Reinforced Concrete Structures: Do not damage any reinforcing components part of reinforced concrete structures, by drilling, coring, cutting, or other similar operations; including, but not limited for, penetrations, expansion bolts, dowels, etc. Locate reinforcing components with pachometer or other reliable detecting device prior to initiating any potentially damaging operations. Where existing reinforcing components prevent work to be accomplished, notify and secure direction from Consultants prior to conducting any operation.
- D. Operational and Safety Limitations: Do not cut and patch operational elements or safety related components in a manner that would result in a reduction of their capacity to perform in the manner intended, including energy performance, or that would result in increased maintenance, or decreased operational life, or decreased safety.
- E. Matching of Exposed-to-View Surfaces:
  - 1. Intent: Cutting and patching work not evident in exposed, final finished, in-place work.
  - 2. Approvals: Consultants to approve following conditions, prior to execution of cutting and patching work.
    - a. Work scheduled with other concealing type finishes, cannot be fully concealed after final finishes are applied, e.g. telegraphing through paint coatings.
    - b. Work not scheduled with any concealing finishes cannot be blended in manner with existing surfaces so that patching is not readily evident to Consultants.
  - 3. Mockups: Consultants approval to be achieved by mockup in existing work in areas selected by Consultants.
- F. Concealed Surfaces: Concealed work may be less rigorous in finishing and final appearance but should be finished flush with adjacent surface with some attempt to smoothly transition the patching materials with adjacent surface.

## PART 2 - PRODUCTS

### 2.01 MATERIALS:

- A. General: Except as otherwise indicated or as directed by the Consultants, use materials for patching that are identical in appearance to existing materials (unless otherwise acceptable to Consultants), result in equal or better performance characteristics than material being patched, and attain bond strengths acceptable to Consultants.

### **PART 3 - EXECUTION**

#### 3.01 PERFORMANCE:

- A. Personnel: Employ skilled workmen to perform cutting and patching work.
- B. Cutting: Cut the work using least destructive but effective methods. In general, it is intended that finish cut surfaces to be clean, straight, and smooth. Method of cutting should minimize damage to adjacent finished surfaces.
- C. Patching: Patch and blend work with adjacent surfaces to obscure evidence of work to greatest extent possible by methods approved by Consultants.

END OF SECTION

## SECTION 01740 - CLEANING

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Cleaning during construction.
  - 2. Final Project cleaning.
  - 3. Waste control.
- B. Related Sections.
  - 1. Division 1 Sections in general.
  - 2. "Section 01500 - Temporary Facilities and Quality Controls".

#### 1.02 DEFINITIONS:

- A. Clean:
  - 1. Relative to Installed Products: Products cleaned in accordance with Manufacturer's recommended procedures, cleaning agents and equipment to remove trash, dust, dirt, stains, and mars from product and adjacent surfaces and areas. Polishing materials are included for materials typically polished.
  - 2. Relative to General Construction Trash and Debris: Verify intent form Owner's Construction Manager and include impacts in Bid.

#### 1.03 SUBMITTALS:

- A. Product Data: If specified or requested by Consultants, submit cleaning data.
- B. Closeout Submittals: Refer to "Maintenance" paragraphs herein.

#### 1.04 QUALITY ASSURANCE:

- A. Trash Removal: Refer to "Section 01500 - Temporary Facilities and Quality Controls".
- B. General Construction Trash and Debris:
  - 1. Responsibility: Contractor is responsible for informing all Entities prior to signing Contract for the Work, the expected level of cleanliness expected by the Construction Manager.
  - 2. Warning Notices: If required, no more than three written warning notices will be issued by Construction Manager for removal of ignored trash and debris; depending upon degree of non-compliance, potential hazard to Project, and severity of non-complying conditions, e.g. odors, quantities, appearance, etc. When reasonable written warning notices are unheeded, Owner at his

discretion may remove any trash and debris for which reasonable written warnings have been given and costs for removal deducted from Contractor's payments.

1.05 MAINTENANCE:

- A. Maintenance Instructions: For primary materials in each Specification Section 2-16, submit each Manufacturer's standard published maintenance instructions, whether specified or not. Instructions to include recommended material, equipment, schedules, and procedures.

**PART 2 - PRODUCTS**

2.01 MATERIALS:

- A. General: Use only cleaning materials, methods, and equipment recommended by the Manufacturer of the product to be cleaned; specifically for types of cleaning required. Materials utilized should not be detrimental to the original characteristics of the cleaned product.

**PART 3 - EXECUTION**

3.01 DURING CONSTRUCTION:

- A. Premises: Clean premises daily.
- B. Surfaces, General: Responsible parties to clean surfaces contaminated by them. Remove as quickly as needed to prevent permanent damage and to prevent any deterioration to surfaces. Seek written approval of methods for removal of contaminants from surfaces installed by others.
- C. Existing Work: When work operations involves working with existing work, clean exposed, semi-exposed, and concealed components of dirt, mars, stains, etc., without damage and deterioration to such surfaces.
- D. Construction Trash and Debris: Remove trash offsite daily to prevent obstructions and hazard, e.g., fire hazards, and as required to keep the Project reasonably clean and neat in appearance.
- E. Hazardous Materials: Use in manner approved by Authorities. When not in use, contain in proper containers. Dispose of waste off Site in lawful manner.

3.02 AT TIME OF SUBSTANTIAL COMPLETION:

- A. Schedule cleaning so that work can be inspected in clean condition at all scheduled inspections.

3.03 AT TIME OF FINAL INSPECTION:

- A. Comply with same requirements of "Substantial Completion" Inspection.

END OF SECTION

## SECTION 01770 - CLOSEOUT PROCEDURES

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Administration requirements for Contract Closeout.
- B. Related Sections.
  - 1. Division 1 Sections, general.
  - 2. "Section 01740 - Cleaning".
  - 3. "Section 01785 - Project Record Documents".
  - 4. "Section 01820 - Demonstration and Training".

#### 1.02 SUBMITTALS:

- A. At Time of Request for Substantial Completion Inspection:
  - 1. Request for Inspection.
  - 2. Application for Payment.
  - 3. Lien waivers.
  - 4. List of incomplete Work.
  - 5. Final adjustment of accounts for change orders.
  - 6. Insurance change-over requirements.
  - 7. Final Authority releases for full use of project.
  - 8. Project Record Documents for review.
  - 9. Owner paid for additional materials and equipment.
- B. After Substantial Completion Inspection.
  - 1. Punch list, if any.
- C. At Time of Request for Final Inspection:
  - 1. Request for Final Inspection.
  - 2. Final Application for Payment.
  - 3. Consent of Surety for Final Payment: AIA Document G707.
  - 4. Final lien releases.
  - 5. Substantial Completion Punch List: Indicate 100% completion.
  - 6. Completed Project Record Documents.
- D. Other: Refer to each Specification Section.

#### 1.03 QUALITY ASSURANCE:

- A. Number of Consultant's Inspections.
  - 1. Number: Consultants has scheduled only two (2) inspections each for Substantial Completion and Final Completion. Re-inspections beyond the scheduled inspections are considered additional inspections.

2. Cost for Additional Inspections: Pay for Consultant's reasonable cost including, but not necessarily limited to, Consultant's personal time at current billing rates, costs for transportation and lodging, if required, and meals.
- B. Punch List Records: Contractor to record and submit written record to Consultants. Revise as requested by Consultants.

## **PART 2 - PRODUCTS (Not Used)**

## **PART 3 - EXECUTION**

### 3.01 PREPARATION-SYSTEMS TESTING:

- A. Owner Instruction: Complete systems testing and complete instructions of Owner's designated representatives prior to request for Substantial Completion inspection.
- B. Special Requirement-Video Taped Sessions: Refer to "Section 01820 - Demonstration and Training".

### 3.02 INSPECTIONS REQUIRED:

- A. Substantial Completion Inspection.
- B. Final Completion Inspection.

### 3.03 GENERAL INSPECTION PROCEDURE:

- A. Conduct inspection after successful completion of submissions and its acceptance by Consultants.
- B. Contractor to record punch list items, if any.
- C. Consultants to certify successful inspection or schedule additional inspections.

### 3.04 ADDITIONAL INSPECTIONS:

- A. The Work: Completion of outstanding work is to be completed expeditiously by Contractor without interruption and will full forces. Submit schedule of completion of each work.
- B. Procedure: Re-conduct inspections in accordance with "general procedure"; until successful review by Consultants achieved.

END OF SECTION

## SECTION 01785 - PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Requirements for Project Record Documents.
- B. Related Sections.
  - 1. Division 1 Sections in general.
  - 2. "Section 01770 - Closeout Procedures".

#### 1.02 DEFINITIONS:

- A. Record Documents: Contractor produced documents representing an accurate recording of the Work provided during the Contract Period; including work that varied from that indicated in the original Contract Documents. Documents include Record Contract Drawings, Record Contract Project Manuals, Record Support Data, and Operation & Maintenance Manuals.
- B. Record Contract Drawings: The primary blueprint Contract set of Drawings used to construct the Project and to which drawn changed information is recorded.
- C. Record Contract Project Manuals: The primary Project Manuals used to construct the Project and containing the specifications and other related written Contract data to which changed written information is recorded.
- D. Record Support Data: Consultants approved, drawn written, published Manufacturer's data and Shop Drawings, which are allowed for use as Record Documents; when standard recording methods can be shown not too be effective or not possible.
- E. Operation & Maintenance Manuals: Organized manuals containing following primary data:
  - 1. Historical data as specified herein.
  - 2. Manufacturer's published Product and related data of all primary products from each Specification Section; including warranties.
  - 3. Operation and maintenance data required for mechanical and electrical work
- F. As-Built Documents: Contractor produced Drawings, required during course of the Work, representing an accurate recording of built structures, and used where Contractor requires clarification with regard to Consultant's intent for subsequent work affecting the drawn conditions.

This is not the “historical” definition of this word and should not be construed as such.

1.03 SUBMITTALS:

- A. Record Documents:
  - 1. Record Contract Drawings: One (1) bound record set.
  - 2. Record Project Manuals: One (1) bound record set.
  - 3. Support Data: One (1) bound record set, if any.
  - 4. Operation & Maintenance Manuals: One (1) bound record set.
  - 5. Other:
    - a. Record progress photos as specified in “Section 01310 - Project Management and Coordination”.
    - b. Final site survey as specified in Division 1.
    - c. Audio-video recording of Owner instruction as specified in “Section 01820 - Demonstration and Training”.
- B. As-Built Documents: One (1) set; each time required.

1.04 QUALITY ASSURANCE:

- A. Record Updating:
  - 1. Up-to-Date Records: Maintain up-to-date documents, Record data within five (5) working days after installation of each specific portion of Work requiring recording, except no record data to be recorded after concealment of each work.
  - 2. Out-of-Date Records: If the Records are not being kept reasonably up to date, the Consultants may withhold payment requests until Record Documents are satisfactorily updated.
- B. Operation & Maintenance Manuals: Organization and included materials to be approved by Consultants,

**PART 2 - PRODUCTS (Not Used)**

**PART 3 - EXECUTION**

3.01 RECORD DOCUMENTS - GENERAL:

- A. Maintenance of Documents: Maintain documents in clean, dry and undamaged condition. Use documents only as necessary to record required information. Do not use as working Construction Documents.
- B. Availability: Make documents available to the Consultants upon request.
- C. Time of Submission: Refer to “Section 01770 - Closeout Procedures”.

- D. Labeling:
1. Stamp: Secure rubber stamp with words, "RECORD DOCUMENTS", in bold capital letters, approximately 1" high.
  2. Document Stamping: Stamp document in permanent red ink as follows.
    - a. Contract Drawings: Each page.
    - b. Manual Inserted Book Bound Information: Front cover.
    - c. Manual Inserted Stapled and Inserted Individual Pages: Each page.

3.02 RECORD DOCUMENTS – RECORD CONTRACT DRAWINGS, RECORD CONTRACT PROJECT MANUALS, & RECORD SUPPORTING DOCUMENTS:

- A. Information Required for Record Drawings and Project Manuals:
1. General: Record installed work ("field conditions") which varies significantly from the work as originally indicated on Contract Document. Record concealed work which is referenced to exposed-to-view features.
  2. Contract Drawings: Record data to scale to clean set of blueprints; dedicated only for record purposes and not for any other purpose.
  3. Specification of Project Manual: Record changes to specifications as a result of actual installations.
- B. Record Supporting Documents:
1. Option: Changes may be recorded to other documents only where the intended record date cannot be adequately recorded on Record Drawings or Record Project manual and if a supporting document significantly indicates the required information more clearly than the Drawing or Project Manual.
  2. Restriction: Minimize use of such documents and where used, such documents shall be acceptable to the Consultants, prior to its use.
  3. Recording Information: Reference such documents appropriately to the Drawing and Specifications. Draw and note changes where different than original drawn information. Such documents shall be compiled into logically organized and bound sets; in manner approved by Consultants.
- C. Method of Recording: Legibly mark with erasable red pencils or other contrasting colored pencils when more than one color may more clearly delineate the recorded information. Where to Contract Drawings, record information to same scale as drawings.

3.03 RECORD DOCUMENTS – OPERATING & MAINTENANCE MANUALS:

- A. Format – General:
1. Binders: Assemble data in hard covered 3 ring, D-ring, binders with clear plastic pockets at front, back, & spine. Provide number of

- binders as required for each set to comfortably house enclosed data.
2. Cover Sheet: Insert cover sheet, for front and spine, with Project and other information as required by Consultants. Data to be computer generated text and graphics. Where more than one volume submitted, indicate "volume of volumes" applicable to each volume in set provided.
  3. Indexed Data: Index groups of related data. Provide type written identification on each index tab.
  4. Electronic format: Provide reproducible, non-secured Portable Document Format (PDF).
- B. Format – Data Groups: Group data in following broad categories and order. Data within each group to be also logically organized; as acceptable to Consultants.
1. Table of Contents: Detailed listing of contents of each manual.
  2. Contractor's Project Warranty: Original executed warranty, warranting all year from date certified for Substantial Completion.
  3. Contractor Document List:
    - a. List of all Record Drawings.
    - b. List of Sections in Record Project Manual.
    - c. List of Supporting Record Data, if any.
  4. Permits: Signed copies of Authority required permits.
  5. Division 2 – 16 Specification Sections: For each Project Manual listed Specification Section, included following in manuals.
    - a. Intent: Provided information on primary installed products of each information that Owner knows exactly which materials were installed in the Project.
    - b. Entity Documentation: List the Manufacturer, Installer, and Supplier Company Name, Project contact, full address, phone/fax/e-mail number.
    - c. Product Data: Primary published date. All need not be provided.
    - d. Maintenance Data: Manufacturer's standard published data on cleaning materials, recommended equipment, restrictions, etc., as typically published by Manufacturer for each product.
    - e. Standard Warrantees: Insert all standard warrantees available from each Manufacturer; applicable to each product. Execute in behalf of Owner, if execution required by Manufacturer. Submit executed warrantees.
    - f. Special Warrantees: Insert executed, special warrantees, when required for each product.
    - g. User Manuals: If any, for product, insert with related literature for product.
    - h. Life Safety, Tested, Engineer Requirements: Include for each product, data affecting regulatory life safety issues, e.g. fire and structural performances, and any regulatory and specified testing and engineering required for performances.
    - i. Mechanical, Electrical, Electronic Equipment: Insert

Services Centers, Maintenance Contracts, user manuals, diagrams, spare parts listing, resting-balancing-adjustment report, final meter readings, start up performance reports, etc., as specified and as

3.04 AS-BUILT DOCUMENTS:

- A. Submittal: Under the conditions related to in the “Quality Assurance” paragraphs herein, submit Drawings; in a legible format, showing the existing conditions that would impact the work as drawn in the Contract Documents. The Drawings shall be in AutoCAD format, unless noted. All drawings shall be clean, neat, and legible with the dimensional information provided and the depiction shown can be correlated with the drawn information in the Contract Documents.
- B. Execution: The Consultants will issue such changes as necessary to conform the Work to his original intent and the Contractor shall proceed in accordance with the requirements indicated.

END OF SECTION

## SECTION 01820 - DEMONSTRATION AND TRAINING

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. Section Includes:
  - 1. Administration requirements for demonstration and training.
- B. Related Sections.
  - 1. Division 1 Sections, general.
  - 2. "Section 01770 - Closeout Procedures".

#### 1.02 SUBMITTALS:

- A. Training Materials: Submit appropriate materials for following.
  - 1. For each Owner's participant.
  - 2. Dedicated set of materials as part of Closeout submittals.
- B. Closeout Submittals:
  - 1. General: Refer to "Section 01785 - Project Record Documents".
  - 2. System Manuals: Submit number in accordance with individual Specification Sections, but not less than two (2) complete hard copy set of published manuals and other published documents.
  - 3. DVD Disks and USB: Submit two (2) sets of DVD disks and USB flash drive with electronic PDF and MP4 video files required for manufacturer's demonstration and training session.

#### 1.03 QUALITY ASSURANCE:

- A. Audio-Video Recording: Audio-video recording is not required for all Owner instruction, but is required for all primary product systems; including following.
  - 1. Mechanical related systems.
  - 2. Any system that is software monitored or driven.
  - 3. Other as may be specified.
- B. Training Instructors: Manufacturer's instructors to be technically trained and totally familiar with all aspects of each specific Project product or system for which training required.
- C. Classrooms: Where proper training and instruction is specified or required to be performed in classroom type facilities by Manufacturer, comply with following.
  - 1. Availability of Facilities:
    - a. Owner's Facilities: Verify availability and suitability of Owner's facilities; prior to Bid.
  - 2. Provide the following, at a minimum.

- a. Equipment: If not available at the Facility, bring in or rent appropriate equipment, e.g., audio and video equipment, projection screens, marker boards, etc.
  - b. Training Materials: As required for proper instruction of participants, e.g. usual published training handouts, training videos, writing pads, pens, etc.
- D. Training Period:
1. Length of Training: As specified; where not specified, verify prior to Bid and include impacts in Bid; otherwise adequacy of training period to be determined by Engineer based on Owner satisfaction and at no additional cost to Owner.
  2. Training Times: Arrange at Owner's convenience.
- E. Recording Conditions:
1. Manufacturer's standard prerecorded training video tapes or other video formats may be an option to field video recording of instruction; when it can be shown that video instruction is specific to Owner's system and of acceptable quality to Owner. Approval to be in writing.
  2. Regardless of Owner's decision, available prerecorded training video materials are to be submitted as part of Closeout Documents.

## **PART 2 - PRODUCTS**

### **2.01 EQUIPMENT:**

- A. Video Recording Equipment:
1. Primary Recorder: DVD Camcorder; with following minimum capabilities.
    - a. Resolution: 640 x 480 minimum; digital video.
    - b. Image Format: Color; JPEG minimum.
    - c. Zoom: 10X minimum.
    - d. Audio: Dolby digital; with noise reduction technology.
- B. DVD Disks: DVD-R disks.
- C. Accessories: Following is optional; unless required by Manufacturer or required to ensure quality of recording session.
1. Tripod.
  2. Camcorder mounted lighting.
  3. Wireless microphones.
  4. Additional independent lighting.

### **PART 3 - EXECUTION**

#### 3.01 PREPARATION:

- A. General: Ensure all conditions for instruction and audio-video recording are ready.

#### 3.02 INSTRUCTION-GENERAL:

- A. Training Materials: Handout appropriate training materials before instruction begins.
- B. Lessons: Ensure that each participant adequately understands instructions being given. Confirm learning of participants by either or both tests and hands on demonstration of their abilities.
- C. Breaks: Instruction to include adequate breaks to allow participants a break from ongoing instruction.
- D. Question and Answer Period: Allow during instruction; when not considered disruptive to instruction and conclude at end of each instruction session to ensure than any outstanding questions can be answered.

#### 3.03 PROJECT CLOSEOUT:

- A. Submittals: Submit required documents as part of Closeout submittals.

#### 3.04 FOLLOW UP:

- A. Manufacturer Availability: After conclusion of each training, each Manufacturer's Technical and Local Representatives to be readily available to help Owner's personnel; until satisfactory understanding of operation of each system is attained.

END OF SECTION

# LEAHI HOSPITAL SINCLAIR BUILDING HEAT PUMP SOUND ATTENUATION

3675 KILAUEA AVE  
HONOLULU, HAWAII 96816

PROJECT NO. 25-165  
T.M.K.: 3-2-031:001

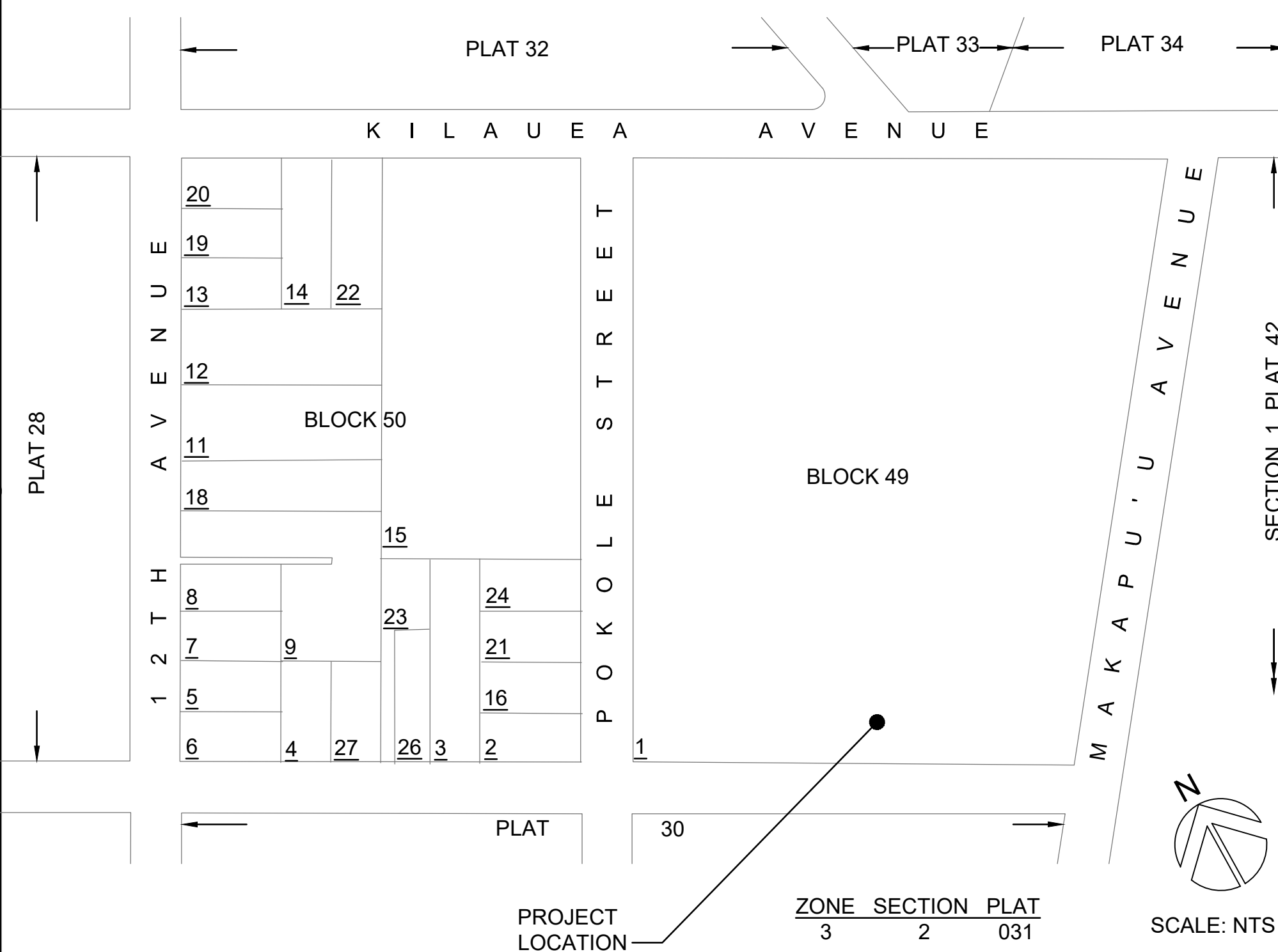
PREPARED BY MECHANICAL / ELECTRICAL ENGINEER: INSYNERGY ENGINEERING, INC.

REVISIONS	BY
1	JY
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03/26/2026	

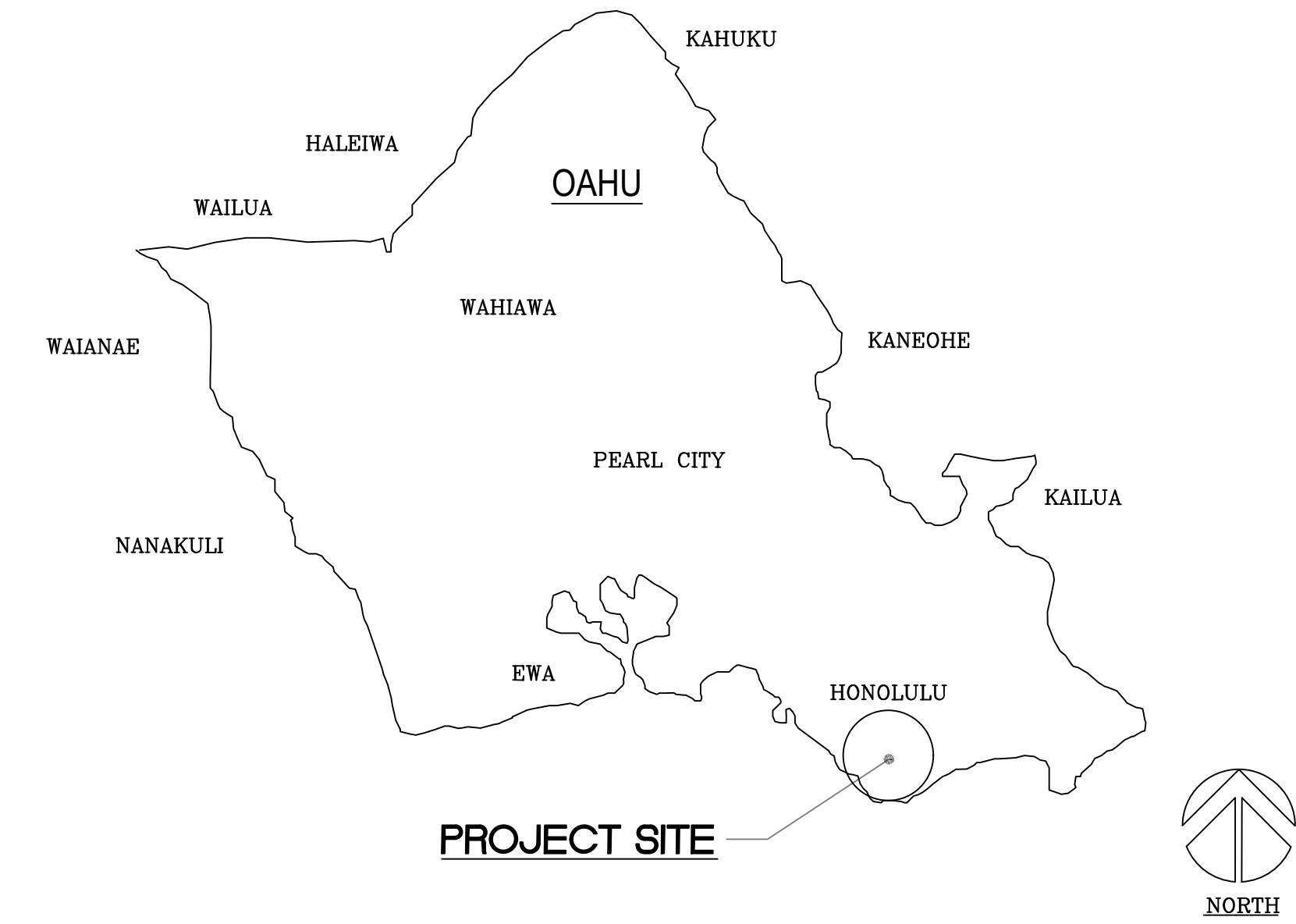
## INDEX OF DRAWINGS

SHT. NO.	DWG. NO.	DESCRIPTION
1	001	TITLE SHEET
2	A-001	ARCHITECTURAL GENERAL NOTES AND ABBREVIATIONS
3	A-002	ARCHITECTURAL SPECIFICATIONS
4	A-003	ARCHITECTURAL SPECIFICATIONS
5	AD101	PARTIAL BASEMENT DEMOLITION FLOOR AND RCP AND DEMOLITION PHOTOS
6	A-101	PARTIAL BASEMENT FLOOR PLAN AND RCP, INTERIOR ELEVATIONS, SCHEDULES, AND DETAILS
7	M-001	MECHANICAL GENERAL NOTES, LEGEND AND SPECIFICATIONS
8	MD101	PARTIAL BASEMENT MECHANICAL DEMO PLAN
9	M-101	PARTIAL BASEMENT MECHANICAL PLAN
10	M-501	MECHANICAL DETAILS
11	M-601	MECHANICAL SCHEDULES AND SCHEMATIC
12	E-001	ELECTRICAL SPECIFICATIONS AND GENERAL NOTES
13	E-101	OVERALL BASEMENT ELECTRICAL PLAN
14	E-102	PARTIAL BASEMENT ELECTRICAL PLAN
15	E-601	ELECTRICAL ONE-LINE DIAGRAM

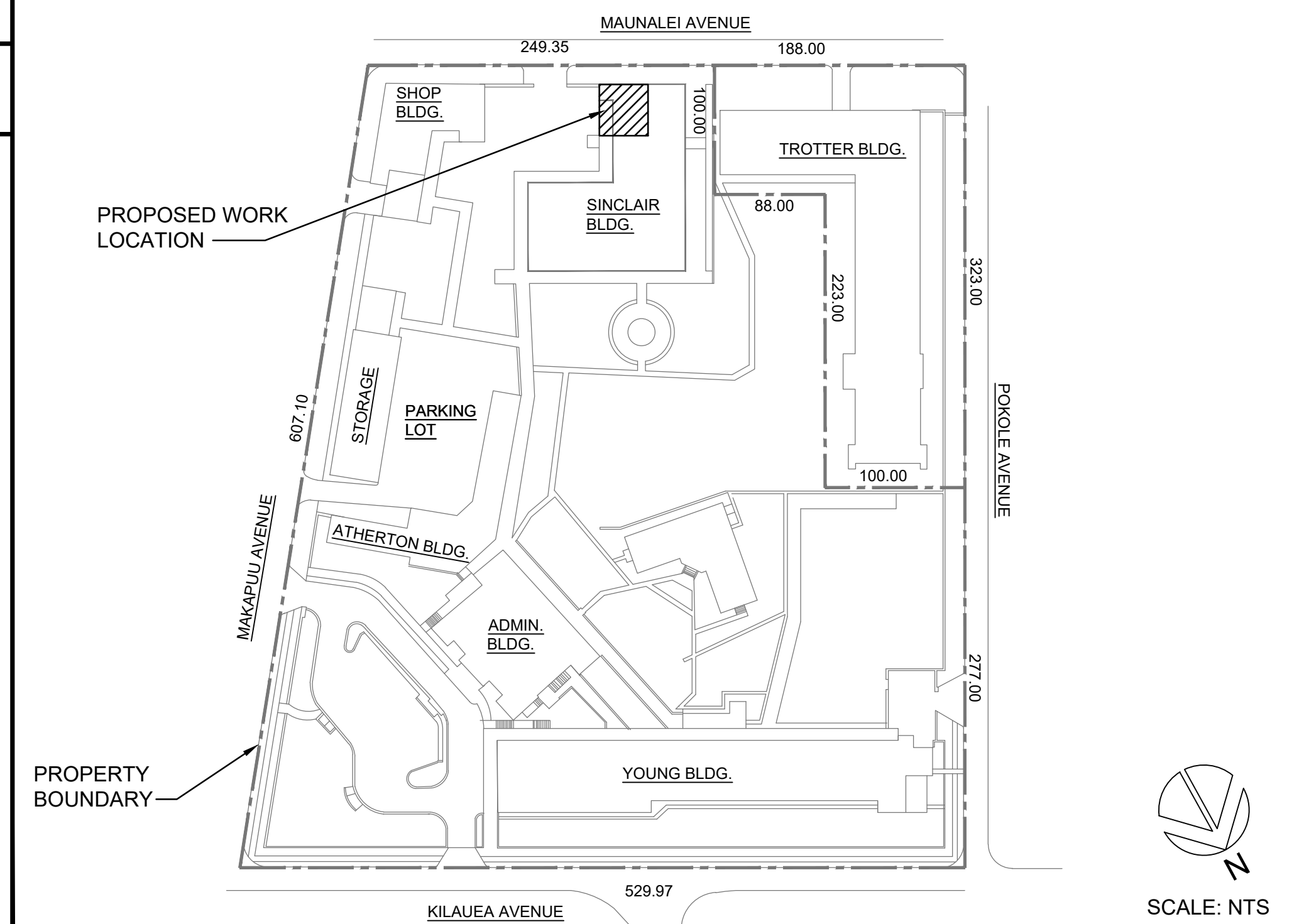
## TAX MAP KEY



## ISLAND MAP



## PLOT PLAN



### PROJECT COMMERCIAL BUILDING CODE INFORMATION:

TYPE OF OCCUPANCY GROUP: B

TYPE OF CONSTRUCTION: IIB

STRUCTURE CODE: OFFICE BUILDING

TOTAL NUMBER OF BUILDING STORY HEIGHT: 2 STORIES

THIS PROJECT UNIT FLOOR LEVEL: 2

EXISTING TOTAL FLOOR AREA (SF): 75,981

NEW FLOOR AREA (SF) OF THIS PROJECT: 0

SPECIAL INSPECTIONS ("YES" OR "NO"): NO

CALLED INSPECTION ("YES" OR "NO"): NO

This work was prepared by me or under my supervision and construction of this project will be under my observation.

*Joel P. Yuen*

EXPIRATION DATE: 03/20/2028

**INSYNERGY ENGINEERING**

MECHANICAL • ELECTRICAL • FIRE PROTECTION

100 BISHOP ST. SUITE 2500, HONOLULU, HAWAII 96813

Phone: (808) 521-3773 Fax: (808) 521-3993

LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION

3675 KILAUEA AVE HONOLULU, HAWAII 96816

T.M.K.: 3-2-031:001

TITLE SHEET

Designed	KT
Drawn	RB
Checked	JY
Date	03-20-2026
Job No.	25-165
Sheet	001
of 1 Sheets	15

## ARCHITECTURAL GENERAL NOTES

THE FOLLOWING UNDERLINED TERMS AS USED HEREIN SHALL BE DEFINED AS:

- THE OWNER: HHSC
- THE OWNER'S REPRESENTATIVE: HHSC REPRESENTATIVE
- THE ARCHITECT: INK ARCH LLC

1. LAWS AND ORDINANCES: AS USED HEREIN SHALL MEAN ALL COUNTY, STATE, AND NATIONAL CODES, ORDINANCES, STANDARDS, RULES, AND REGULATIONS OF ANY NATURE WHICH ARE PERTINENT TO, OR REGULATORY OVER, THE WORK COVERED BY THE CONTRACT DOCUMENTS OF THIS PROJECT. ALL CONTRACTORS SHALL COMPLY FULLY WITH ALL APPLICABLE LAWS AND ORDINANCES. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT BUILDING CODE AND THE LATEST STATE OF HAWAII AMENDMENTS OR THE RESPECTIVE CITY AND/OR COUNTY AMENDMENTS BY EACH AGENCY HAVING JURISDICTION OF THE PROJECT.
2. CONFLICT: IN THE CASE OF ANY CONFLICT WHEREIN THE METHODS, OR STANDARDS OF INSTALLATION, OR THE SPECIFIED MATERIALS ARE NOT IN COMPLIANCE WITH THE REQUIREMENTS OF THE LAWS OR ORDINANCES, THE LAWS OR ORDINANCES SHALL GOVERN. IN THE CASE OF A DISCREPANCY IN THE DRAWINGS OR SPECIFICATIONS, BUT NOT DIRECTLY RELATED TO THE PROVISIONS, CODES, OR ORDINANCES, THE CONTRACTOR SHALL 1) PROVIDE THE BETTER QUALITY, OR GREATER QUANTITY OF WORK, OR 2) COMPLY WITH THE MORE STRINGENT REQUIREMENT IN ACCORDANCE WITH THE ARCHITECT'S INTERPRETATION, OR 3) REQUEST IN WRITING ADDITIONAL CLARIFICATION OR INFORMATION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ALL CONFLICTS IN WRITING.
3. CONDITIONS OF THE WORK: THE INFORMATION INDICATED ON THE DRAWINGS IS BASED ON LIMITED FIELD INVESTIGATION AND ON THE AVAILABLE RESOURCES AT THE TIME OF DOCUMENT PREPARATION. AS A RESULT, THE ACCURACY AND COMPLETENESS OF THE INFORMATION IS NOT GUARANTEED ON DATE OF COMMENCEMENT OF CONSTRUCTION. THEREFORE, THE CONTRACTOR SHALL VERIFY THE DIMENSIONS SHOWN ON THE DRAWINGS WITH ACTUAL FIELD MEASUREMENTS. EXAMINE THE JOB SITE, VERIFY ALL FIELD CONDITIONS AND PERTINENT DIMENSIONS PRIOR TO PREPARING LAYOUTS, SUBMITTALS, SHOP DRAWINGS, AND/OR ORDERING ANY MATERIAL, AND PROVIDE THE LABOR AND MATERIALS REQUIRED TO COMPLETE THE REQUIRED WORK.
4. WORKMANSHIP: ALL WORK SHALL BE PERFORMED IN A PROFESSIONAL MANNER. WORKMANSHIP SHALL BE REPRESENTATIVE OF THE BEST HAWAII INDUSTRY STANDARD OF THE RESPECTIVE TRADES. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING PRIOR TO THE COMMENCEMENT OF WORK, IF THERE ARE ANY DIMENSIONAL DISCREPANCIES, OR IF THERE ARE ANY CONDITIONS THAT EXIST WHICH MAY PREVENT THE CONTRACTOR'S WORKMANSHIP AND PERFORMANCE OF WORK PER CONTRACT DOCUMENTS, AND/OR OF ANY AND ALL ADDITIONAL WORK THAT MAY BE REQUIRED AS A RESULT OF THE OBSERVED CONDITIONS.
5. OMISSIONS: OMISSIONS OF DRAWINGS, OR SPECIFICATIONS, OR THE OMISSIONS OF DETAILS OF WORK WHICH ARE MANIFESTLY NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, AND/OR WHICH ARE PER HAWAII INDUSTRY STANDARD CUSTOMARILY PERFORMED, SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING SUCH OMITTED, OR INCORRECTLY DESCRIBED DETAILS OF THE WORK, BUT SHALL BE PERFORMED AS IF FULLY AND CORRECTLY SET FORTH AND DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR UPON DISCOVERY OF OMISSION SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE VERBALLY OF SUCH OMISSIONS AND PROVIDE A WRITTEN STATEMENT OF THE OMISSIONS WITHIN (2) WORKING DAYS OF VERBAL NOTIFICATION.
6. INTENT OF THE DRAWINGS: THE DRAWINGS ARE INTENDED TO DEFINE AND ESTABLISH THE PHYSICAL REQUIREMENTS OF THE PROJECT, I.E., THE DESIGN, LOCATIONS AND DIMENSIONS OF THE WORK, BASED ON RECOGNIZED STANDARDS EVEN IF NOT ACTUALLY SHOWN, BUT REASONABLY INFERRED. THE CONTRACTOR SHALL REVIEW AND VERIFY THE INFORMATION ON ALL DRAWINGS WITHIN A REASONABLE TIME BEFORE PERFORMING ANY WORK AND UPON DISCOVERY OF ANY OMISSION AND/OR CONFLICT IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING OF ANY OMISSIONS, CONFLICTS AND DISCREPANCIES. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL SUBCONTRACTORS/TRADES TO ACHIEVE THE DESIGN INTENT AND SPECIFIED REQUIREMENTS AND IS RESPONSIBLE TO COMPLETE ANY AND ALL WORK ASSOCIATED WITH SUCH COORDINATION.
7. COMPLETION OF THE WORK: THE CONTRACTOR SHALL IN THE EXECUTION OF WORK BY ALL TRADES, PERFORM ANY AND ALL CUTTING, PATCHING, REPAIRING, RESTORING AND THE LIKE NECESSARY TO COMPLETE THE WORK. THE CONTRACTOR SHALL RESTORE ANY DAMAGED OR AFFECTED SURFACES RESULTING FROM THE WORK OF THIS CONTRACT TO THEIR ORIGINAL CONDITION AND FINISH TO THE SATISFACTION OF THE OWNER. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO SAFETY PRECAUTIONS, FASTENERS, ANCHORAGES, ETC. UNLESS NOTED OTHERWISE.
8. DIMENSIONS: UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DOCUMENTS, ALL DIMENSIONS ARE TAKEN TO THE FACE OF FINISH CONSTRUCTION. WRITTEN DIMENSIONS PREVAIL. DO NOT SCALE DRAWINGS UNLESS GRAPHIC SCALE IS PROVIDED ON THE SPECIFIC DRAWING. SHOULD DIMENSIONAL DISCREPANCIES BE FOUND, CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY FOR CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.
9. CLEAN UP: THE CONTRACTOR SHALL CLEAN AND REMOVE ALL TRASH, DIRT, DEBRIS, AND SPILLAGE ARISING FROM THE WORK AREA DAILY TO THE SATISFACTION OF THE OWNER AND THE ARCHITECT, INCLUDING BUT NOT LIMITED TO: CLEANING OF DIRT, PUTTY, PAINT, OVERSPRAY, DUST, ETC. FROM FLOORS, WORK AREAS, COUNTER TOPS, DOOR AND WINDOW FACES AND FRAMES.
10. SAFE OPERATIONS: THE CONTRACTOR SHALL ENSURE THAT ANY AND ALL CONSTRUCTION ACTIVITIES DO NOT IMPACT OR INTERFERE WITH NORMAL OR SAFE OPERATIONS AT THE PROJECT SITE. THE CONTRACTOR SHALL TAKE ALL SAFETY PRECAUTIONS NECESSARY TO PROTECT THE BUILDING OCCUPANTS AND THE PUBLIC THROUGHOUT THE DURATION OF THIS PROJECT.

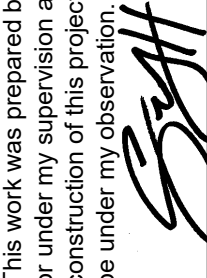
11. PREVENT DAMAGE: THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO EXISTING AND COMPLETED STRUCTURES/LANDSCAPING/SITE IMPROVEMENTS OF THIS PROJECTS AS WELL AS ON ADJACENT PROPERTY(IES) TO THAT OF THIS CONTRACTED WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR LABOR/MATERIAL COSTS OF ANY DAMAGES TO ANY CONSTRUCTED WORK AND/OR EXISTING STRUCTURES/LANDSCAPING/SITE IMPROVEMENTS CAUSED BY HIS OPERATIONS.
12. DO NOT BLOCK EXITS: THE CONTRACTOR SHALL NOT BLOCK OR OBSTRUCT ANY FIRE LANES AND FIRE EXIT WAYS DURING THE EXECUTION OF WORK THROUGHOUT THIS PROJECT DURING THE CONSTRUCTION CONTRACT PERIOD.
13. SOUND AND NOISE CONTROL: THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE OWNER'S REPRESENTATIVE ALL WORK THAT WILL GENERATE EXCESSIVE NOISE WHICH MAY DISRUPT NORMAL OPERATING ACTIVITIES.
14. MATERIAL DISPOSAL: UNLESS NOTED IN THE DRAWINGS OR SPECIFICATIONS, MATERIALS RESULTING FROM THE DEMOLITION WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS OR AS SPECIFIED.
15. DEFINITIONS:
  - a) "FURNISH" MEANS "FURNISH ONLY". MATERIALS OR ITEMS TO BE FURNISHED SHALL BE NEW AND CONSIGNED TO THE CONTRACTOR AND DELIVERED TO THE SITE.
  - b) "INSTALL" MEANS "INSTALL ONLY" FURNISHED MATERIALS OR ITEMS. SUCH MATERIALS OR ITEMS SHALL BE RECEIVED AT THE SITE, UNLOADED, STORED, PROTECTED, AND INSTALLED IN PLACE, INCLUDING FINAL CONNECTION, UNLESS SUCH WORK IS SPECIFICALLY EXCLUDED.
  - c) "PROVIDE" MEANS "FURNISH AND INSTALL" COMPLETE, IN PLACE AND READY FOR USE, INCLUDING FINAL CONNECTIONS. ALL WORK SHOWN IN THE DRAWINGS SHALL BE UNDERSTOOD AS "PROVIDE" WHETHER NOTES INDICATING "PROVIDE" ARE INDICATED OR NOT.
  - d) WORDS "CONTRACTOR SHALL" ARE IMPLIED AND SHALL BE SO UNDERSTOOD WHEREVER A DIRECTION IS STATED IN IMPERATIVE MOOD AND DIRECTION "PROVIDE" IS USED.
  - e) UNLESS SPECIFICALLY STATED AS "EXISTING", ALL MATERIALS SHALL BE NEW IN ALL CASES WHEN MATERIAL NOTES ARE ADDED TO DRAWINGS. USES OF "FURNISH" AND "PROVIDE" AUTOMATICALLY MEAN "NEW" UNLESS SPECIFICALLY STATED AS "EXISTING".
19. PRE-CONSTRUCTION ASSESSMENT: BEFORE STARTING ANY WORK ON ANY EXISTING CONSTRUCTION THE CONTRACTOR SHALL MAKE A THOROUGH AND COMPLETE INVESTIGATION OF ANY RECIPIENT SURFACES AND DETERMINE THEIR SUITABILITY TO RECEIVE REQUIRED ADDITIONAL CONSTRUCTION AND FINISHES. THE CONTRACTOR SHALL MAKE WHATEVER REPAIRS AND CONDITIONING REQUIRED TO PROPERLY PREPARE SUCH SURFACES.
20. SUBCONTRACTORS: THE USE OF UNLICENSED CONTRACTORS IS STRICTLY PROHIBITED. THE CONTRACTOR IS RESPONSIBLE TO THE OWNER FOR ACTIONS OF THE CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING ANY PORTIONS OF WORK UNDER CONTRACT WITH THE CONTRACTOR.
21. HAZARDOUS MATERIALS: HAZARDOUS MATERIAL ABATEMENT MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS INDICATED IN THE DRAWINGS AND/OR SPECIFICATIONS. BURNING OF ANY DEBRIS IS NOT PERMITTED. EXPLOSIVES ARE NOT ALLOWED.
22. WOOD: ALL NEW WOOD SHALL BE TERMITE TREATED. ALL PAINT ON WOOD SURFACES SHALL CONTAIN A MILDEWCIDE ADDITIVE. PROVIDE WRITTEN CERTIFICATION OF TERMITE TREATMENT.
23. DISSIMILAR METAL PROTECTION: THE CONTRACTOR SHALL PROVIDE DISSIMILAR METAL PROTECTION.
24. MECHANICAL AND ELECTRICAL ITEMS: ALL NEW EXPOSED MECHANICAL AND ELECTRICAL PIPING, CONDUITS, DUCTWORK, SUPPORTS AND RELATED FITTINGS, AND FASTENERS ARE TO BE PAINTED THE SAME COLOR/SHEEN AS THE COLOR/SHEEN OF THE SURFACE IT IS ATTACHED TO UNLESS OTHERWISE NOTED.
25. PAINTING: PAINT ALL NEW WORK THAT IS COMPLETED AND LEFT EXPOSED TO VIEW, UNLESS OTHERWISE NOTED. PAINT PRODUCT(S) SHALL BE COMPATIBLE TO THE SUBSTRATE OR SURFACE IT IS APPLIED TO AND SHALL RECEIVE THE PROPER SURFACE PREPARATION AND COATINGS AS RECOMMENDED BY THE PAINT MANUFACTURER. THE CONTRACTOR SHALL CONFIRM WITH THE ARCHITECT ALL FINISH PAINT COLOR AND SHEEN SELECTION(S).
26. "EXISTING" VERSUS "NEW" WORK: ALL BUILDING, AND DETAIL COMPONENTS, SHOWN ON THESE DRAWINGS SHALL BE UNDERSTOOD AS "NEW" UNLESS PREFIXED BY THE WORD "EXISTING". IN THE EVENT THE CONTRACTOR DISCOVERS CONFLICTING INFORMATION, THE CONTRACTOR SHALL IMMEDIATELY SUBMIT IN WRITING, A FORMAL REQUEST FOR INFORMATION ("RFI") TO THE ARCHITECT FOR A RESOLUTION TO THE RFI.

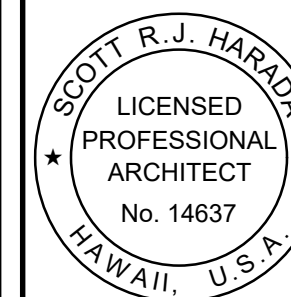
## ARCHITECTURAL ABBREVIATIONS

ACT	ACOUSTIC CEILING TILE	N/A	NOT APPLICABLE
BD	BOARD	NIC	NOT IN CONTRACT NUMBER
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	NO	NOT TO SCALE
CLR	CLEAR	OFOI	OWNER FURNISHED, OWNER INSTALLED
CONC	CONCRETE	OC	ON CENTER
DWGS	DRAWINGS	PL, PLAM	PLASTIC LAMINATE
ELEC	ELECTRICAL	PT	PAINT
FIN	FINISH	TBD	TO BE DETERMINED
FLR	FLOOR	THK	THICK
FRP	FIBER REINFORCED PLASTIC	TMK	TAX MAP KEY
GT	GROUT	TYP	TYPICAL
GYP	GYP SUM		
HOL	HOLLOW	WB	WALL BASE
HT	HARD TILE	WD	WOOD
HW	HARDWARE	WT	WINDOW TREATMENT
		W/	WITH
MET	METAL		
MFR	MANUFACTURER		
MIN	MINIMUM		

### REVISIONS

NO.	DESCRIPTION	DATE

This work was prepared by me or under my supervision and construction of this project will be under my observation.  
  
 EXPIRATION DATE 04/30/2026



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 Phone: (808) 521-3773 Fax: (808) 521-3963

**LEAHI HOSPITAL SINCLAIR BUILDING  
 HEAT PUMP SOUND ATTENUATION**  
 3675 KILAUEA AVE HONOLULU, HAWAII 96816  
 TMK:   
 ARCHITECTURAL GENERAL NOTES AND ABBREVIATIONS

Designed	MM
Drawn	BB
Checked	EA
Date	03-20-26
Job No.	25-165
Sheet	<b>A-001</b>

# ARCHITECTURAL SPECIFICATIONS

## DIVISION 7 - THERMAL AND MOISTURE PROTECTION

### SECTION 07920 - ELASTOMERIC JOINT SEALANTS

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

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

##### 1.02 SUMMARY

- A. Provide and install complete elastomeric joint sealants as specified for the location/materials.

##### 1.03 SUBMITTALS

- A. Submittals: Comply with project requirements for submittals as specified in Division 01.

##### B. Product Data:

1. Materials list of items proposed to be provided under this Section and locations.
2. Manufacturer's current recommended installation procedures.
3. Written documentation of applicator's qualifications.
4. Certifications from sealant manufacturer that their products are suitable for the use indicated and comply with specification requirements.

- C. Samples: For color verification, provide actual Samples of each type of product proposed for use.

- D. Pre-Construction Field Adhesion Testing: Written results of field tests, including summary of joint preparation, products used and installation techniques.

##### 1.04 QUALITY ASSURANCE

##### A. Installer Qualifications:

1. Installer shall have at least three years of experience in installing materials of types specified and shall have successfully completed at least three projects of similar scope and complexity.
2. Installer shall designate a single individual as project foreman who shall be on site at all times during installation.

- B. Single Source Responsibility for Joint Sealants: Obtain joint sealants of each type from a single manufacturer: SIKA Corporation US or approved equal.

##### C. Pre-Construction Compatibility and Adhesion Testing:

1. Submit to joint sealant manufacturer samples of actual materials that will contact or affect their joint sealants in the Work for compatibility and adhesion testing.
2. This testing will not be required where sealant manufacturer is able to furnish data acceptable to Architect based on previous testing for adhesion and compatibility to materials matching those of the Work.

##### D. Pre-Construction Field Adhesion Testing: (IF REQUESTED IN WRITING BY ARCHITECT)

1. For jobsite field samples prior to general installation, conduct field-tests for adhesion of joint sealants to actual joint substrates using proposed joint preparation methods recommended by manufacturer.
2. Conduct tests for each type of sealant and substrate.
3. Locate field-test joints where inconspicuous or as acceptable to Architect.
4. Include areas typical of those requiring removal of existing sealants and utilize methods proposed for sealant removal that have been pre-approved by Architect.

- E. Field Adhesion Test Method: Use manufacturer's standard field adhesion test methods and methods proposed for joint preparation to verify proper priming and joint preparation techniques required to obtain optimum adhesion of joint sealants to joint substrate. Evaluate and report results of field adhesion testing.

- F. Field Samples: Joints installed during pre-construction field adhesion testing that are accepted by Architect shall be retained as standard of acceptability and incorporated into Work of that area during general installation. At least one such standard of minimum 5 feet in length shall be established for each type of sealant and substrate.

##### 1.05 REGULATORY REQUIREMENTS

- A. Applicable Regulations: Comply with local code and requirements of authorities having jurisdiction. Do not exceed VOC regulations as established by the State of Hawaii; including total VOC content, in grams per liter, for all system components (i.e. primers, adhesives, coatings, and similar items.)

##### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the manufacturer's unexpired-unopened containers with all labels intact, and legible at time of use. Handle and store materials in accordance with manufacturer's recommendations with proper precautions to ensure fitness of material when installed.

##### 1.07 WARRANTY

- A. Warranty: Provide manufacturer's standard warranty for each type of product. Warranty shall include manufacturer's written statement that materials in contact with another have been tested and verified to be compatible.

#### PART 2 - PRODUCTS

##### 2.01 MANUFACTURER

- A. Manufacturer: Sika Corporation. www.sikausa.com. No substitutions without prior written approval by the Architect.

##### 2.02 ELASTOMERIC JOINT SEALANTS

- B. SEALANT: Low-modulus, non-sag sealant; comply with ASTM C920, Type S or M, Grade NS, Class 25, Class 35, Class +50/-50, Class +100/-50 as applicable.

1. Single-Component Urethanes and Silyl-Terminated Polymers: Sikaflex 1a; Sikaflex Textured Sealant, Sikaflex 15 LM, SikaHyflex 150LM.

2. Multiple-Component Urethanes and Silyl-Terminated Polymers: Sikaflex 2c NS EZ mix.

3. Single-Component Silicones: Sikasil WS290, Sikasil WS 295, Sika Silbridge 300.

4. Applications: For interior joints in vertical surfaces and non-traffic horizontal surfaces including, but not limited to, the following:

- a. Control and expansion joints on exposed interior surfaces of exterior walls.
- b. Perimeter joints on exposed interior surfaces of exterior openings.
- c. Perimeter joints between interior wall surfaces and frames of interior doors, windows, storefronts, louvers, elevator entrances and similar openings.
- d. Trim or finish joints subject to movement.

##### 2.03 ACCESSORIES

- A. All accessories to be provided as recommended by sealant manufacturer for substrates indicated including but not limited to Joint Cleaner, Primer, Bond Breaker, Joint Backer, Masking Tape, etc.

- B. Related Materials: As required for a complete and proper installation, as selected by the Contractor and approved by the Sika Corporation US r as compatible, subject to review of the Architect

#### PART 3 - EXECUTION

##### 3.01 EXAMINATION

- A. Verify that surfaces and conditions are ready to accept the Work of this section. Verify joints are properly dimensioned to receive specified sealants. Verify joint surfaces are clean, dry, sound and free of voids, deformations, protrusions and contaminants that may inhibit application or performance of the sealant. Notify Architect in writing of any discrepancies. Commencement of the Work in an area shall mean Installer's acceptance of the substrate.

##### 3.02 PREPARATION

- A. Prepare surfaces to receive sealants in accordance with sealant manufacturer's instructions and recommendations except where more stringent requirements are indicated.

##### 3.03 INSTALLATION

- A. Comply with SIKA Corporation US' written installation instructions for products and applications indicated, unless more stringent requirements apply. Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

##### 3.04 CLEANING

- A. Remove sealant from adjacent surfaces in accordance with sealant and substrate manufacturer recommendations as work progresses.

##### 3.05 PROTECTION

- A. Protect sealants from contact with contaminating substances and from damage from construction operations. Cut out, remove and replace contaminated or damaged sealants immediately, so that they are without contamination or damage at time of Substantial Completion.

## DIVISION 9 - FINISHES

### SECTION 09290 - GYPSUM BOARD

#### PART 1 - GENERAL

##### 1.01 GENERAL CONDITIONS

As Specified in the GENERAL CONDITIONS.

##### 1.02 SUMMARY

- A. Provide all supporting metal framing and gypsum board where indicated on the drawings and as specified herein for a complete installation.

- B. Industry Standard: Comply with applicable code requirements for all labor and materials.

- C. Gypsum Association (GA): Comply with the following but not limited to the requirements of

- a. Gypsum Construction Handbook" published by United States Gypsum Co
- b. GA-216, "Application and Finishing of Gypsum Board", by the Gypsum Association
- c. GA-214, "Recommended Specification: Levels of Gypsum Board Finish", by the Gypsum Association

- D. Sound Transmission Characteristics: Assemblies per ASTM E 90 and classified according to ASTM E 413 by a qualified independent testing agency.

#### PART 2 - PRODUCTS

##### 2.01 MATERIALS

##### A. General Note:

- a. Provide all USA manufactured, new material free of asbestos and formaldehyde.
- b. Provide steel materials for metal support systems with galvanized coating ASTM A653/A653M, G-60 unless noted otherwise

- B. Gypsum Wallboard: ASTM C 1396/C 1396M, 5/8-inch thick unless indicated otherwise,

tapered edges, 48-inches wide, Type "X".

- C. Wallboard Fasteners: ASTM C 1002 or ASTM C 954 as applicable, to steel studs, standard bugle head self-drilling, self-taping corrosive-resistant drywall screws.

- D. Non-Load Bearing Studs: ASTM C 645. Studs shall be rolled formed channel of minimum 20 gauge galvanized steel, ASTM A 653/A 653M, G60, hot-dip galvanized coating.

- a. Minimum 16 gauge for chase wall construction.

- K. PVC Trim Accessories: Provide cornerbeads, edge trim, etc. as required complying with ASTM C 1047, and formed of polyvinylchloride (PVC) unless otherwise indicated or required.

- L. Joint Treatment Materials: ASTM C 475/C 475M; tape and compound type recommended by wallboard manufacturer for the application indicated, except as otherwise noted.

1. Interior: Use perforated tape, and joint and topping compound, or "all-purpose" compound. Use setting-type taping and setting-type sandable topping compounds at tile backing board or unit.

2. Exterior: Use setting-type taping and setting-type sandable topping compounds for gypsum board. Use joint treatment as recommended by exterior sheathing board manufacturer.

- M. Sound Insulation Batt: ASTM C665, "Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing", Type I, except a flame spread of 25 or less and a smoke development rating of 150 or less when tested in accordance with ASTM E84, fiberglass or mineral wool insulation batt for noise control in partitions where shown; unfaced friction fit, sized to fit framing spacing. Noise Reduction Coefficient (NRC) shall be not less than 0.90 for 2-1/2 inch metal stud wall, and not less than 0.95 for 3-5/8 inch metal stud wall unless partition ratings indicate otherwise. NRC values as determined in accordance with ASTM C423.

#### PART 3 - EXECUTION

##### 3.01 EXAMINATION

Examine substrates to which drywall construction attaches or abuts and do not proceed with installation until unsatisfactory conditions have been corrected.

##### 3.02 INSTALLATION OF STEEL FRAMING, GENERAL

- A. Steel Framing Installation Standard: Install steel framing to comply with ASTM C 754 requirements that apply to framing installation.

- B. Install supplementary framing, blocking, and bracing at terminations in the work and for support of the following but not limited to fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, and similar construction to comply with details indicated and with recommendations of gypsum board manufacturer, or if none available, with "Gypsum Construction Handbook" published by United States Gypsum Co.

##### 3.03 INSTALLATION OF STEEL FRAMING FOR NON STRUCTURAL WALLS AND PARTITIONS

- A. Install to conform to ASTM C754 requirements.

- B. Ensure dissimilar metal and CMU/Concrete separation.

##### 3.04 APPLICATION AND FINISHING OF GYPSUM BOARD, GENERAL

- A. Gypsum Board Application and Finishing Standards: Install and finish gypsum board to comply with ASTM C 840, GA-216, and GA-214

##### 3.06 INSTALLATION OF TRIM ACCESSORIES

- A. General: Install to comply with manufacturer's recommendations.

- B. Install corner beads at all external corners.

- C. Install control joints as indicated or not more than 30 feet apart on walls and ceiling over 50 feet long. Obtain Architects approval of all control joint locations prior to installing.

##### 3.07 FINISHING OF GYPSUM BOARD

- A. General: Apply joint treatment at gypsum board joints (both directions); flanges of corner bead, edge trim, and control joints; penetrations; fastener heads, surface defects, and elsewhere as required to prepare work for decoration.

- B. Finish interior gypsum wallboard by applying the following levels of gypsum board finish in accordance with GA-214-96 including but not limited to:

1. Level 4: For areas which are to receive light duty wall coverings, flat paints or light textures. The prepared surface shall be coated with a drywall primer prior to the application of final finishes.

##### 3.08 TOLERANCES

- A. ERECTION TOLERANCES:

- a. Maximum vertical 90 degree alignment variation of studs shall be 1/8" in 10 feet not cumulative.

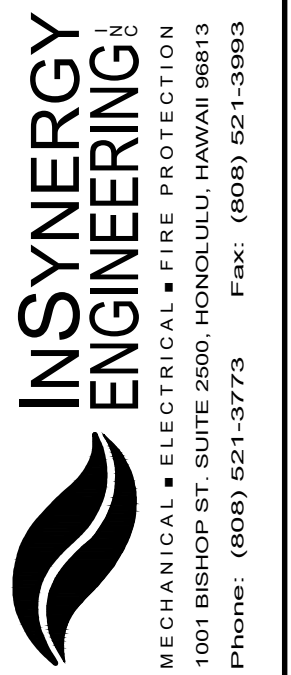
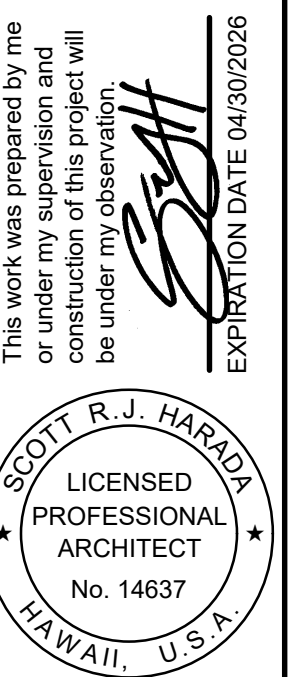
##### 3.09 CAULKING OF PENETRATIONS

- A. Seal all joints around any penetration of a gypsum wall board panel including but not limited to pipes, ducts, electrical items.

##### 3.10 PROTECTION

Provide final protection and maintain conditions, in a manner suitable to installer, which ensures gypsum drywall construction being without damage or deterioration at time of project acceptance.

REVISIONS	BY



**LEAHI HOSPITAL SINCLAIR BUILDING**  
**HEAT PUMP SOUND ATTENUATION**  
 3675 KILAUEA AVE HONOLULU, HAWAII 96816  
 TMK:  
 ARCHITECTURAL SPECIFICATIONS

Designed	MM
Drawn	BB
Checked	EA
Date	03-20-26
Job No.	25-165
Sheet	<b>A-002</b>

# ARCHITECTURAL SPECIFICATIONS

**SECTION 09 90 00 - PAINTING AND COATING**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. Provide all coatings, paint, and stains by Sherwin-Williams where such finish is indicated on drawings and as specified herein for a complete application and installation.

**1.02 REFERENCES**

- A. Material Safety Data Sheets / Environmental Data Sheets: Per manufacturer's MSDS/EDS for specific VOCs (calculated per 40 CFR 59.406). VOCs may vary by base and sheen.

**1.03 SUBMITTALS**

- A. Submit Product Data: For each paint system indicated, including.
  1. Product characteristics.
  2. Surface preparation instructions and recommendations.
  3. Primer requirements and finish specification.
  4. Storage and handling requirements and recommendations.
  5. Application methods.
  6. Cautions for storage, handling and installation.

- B. Verification Samples: For each finish product specified, submit Three (3) samples that represent actual product, color, and sheen on 8" x 10" card stock. Stains to be provided on Three (3) actual samples of species of wood to be used on the Project as specified in the drawings.

**1.04 QUALITY ASSURANCE**

- A. Paint exposed surfaces. If a color of finish, or a surface is not specifically mentioned, Architect will select from standard products, colors and sheens available.
- B. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels unless indicated.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery Storage and Handling: Per Sherwin-Williams' standards and written direction and in accordance with requirements of local authorities and codes having jurisdiction of solvent-based materials, and materials used with solvent-based materials.

**1.06 PROJECT CONDITIONS**

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

**1.07 EXTRA MATERIALS**

- A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
- B. Furnish Owner with an additional 1 gal (3.8 l) of all finish paint, coating stain etc used on Project.

**PART 2 - PRODUCTS**

**2.01 MANUFACTURERS**

- A. Acceptable Manufacturer: Sherwin-Williams (SW), which is located at: 101 Prospect Ave.; Cleveland, OH 44115; Toll Free Tel: 800-524-5979; Tel: 216-566-2000; Fax: 440-826-1989; Email:request info (specifications@sherwin.com)

**2.02 APPLICATIONS/SCOPE**

- A. Interior and Exterior Paints, Stains and Coatings:
  1. All surfaces as indicated on drawings

**2.03 PAINT MATERIALS - GENERAL**

- A. Paints, Stains and Coatings.
  1. Unless otherwise indicated, provide factory-mixed coatings. When required, mix coatings to correct consistency in accordance with SW's written instructions before application. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.
  2. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color. Or follow SW's product instructions for optimal color conformance.
- B. Primers: Per SW's "Best" recommendation.

**2.04 INTERIOR - EXTERIOR PAINT SYSTEMS**

- A. Prior to submitting a Project Contract Cost, submit all Project plans and details to Sherwin-Williams and obtain a Finish Schedule in writing that will list at a minimum:
  1. Location/Material where finish is to be applied
  2. Sherwin-Williams product name/number
  3. Sheen
  4. Coats with wet/dry mil thickness per coat
- B. Submit Sherwin-Williams' Finish Schedule with Project Contract Cost.

**PART 3 - EXECUTION**

**3.01 EXAMINATION**

- A. Do not begin installation until substrates have been properly prepared; notify Architect of unsatisfactory conditions before proceeding. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

- B. Proceed with work only after conditions have been corrected and approved by all parties, otherwise application of coatings will be considered as an acceptance of surface conditions.

- C. Previously Painted Surfaces: Verify that existing painted surfaces do not contain lead based paints, notify Architect immediately if lead based paints are encountered.

**3.02 SURFACE PREPARATION**

- A. General: Surfaces shall be dry and in sound condition. Remove oil, dust, dirt, loose rust, peeling paint or other contamination to ensure good adhesion.
- B. Prepare surfaces that will be finished explicitly per manufacturer's written instructions for type of surface and finish to be applied.

**3.03 INSTALLATION**

- A. Apply all coatings and materials per the Sherwin-Williams' written specifications. Mix and thin coatings according to Sherwin-Williams recommendations.


**3.04 DEFECTIVE MATERIALS AND WORKMANSHIP**

- A. Any defects as noted by Owner or Architect in the completed paint, coating, and stain finish work and or materials specified by this Section will not be accepted, will be provided in a list to the Contractor and must be re-done to the satisfaction of the Architect.

**3.05 PROTECTION**

- A. Protect finished coatings from damage until completion of project.
- B. Touch-up damaged coatings after substantial completion, following manufacturer's recommendation for touch up or repair of damaged coatings. Repair any defects that will hinder the performance of the coatings.

REVISIONS	BY

This work was prepared by me or under my supervision and construction of this project will be under my observation.  
  
 EXPIRATION DATE 04/30/2026

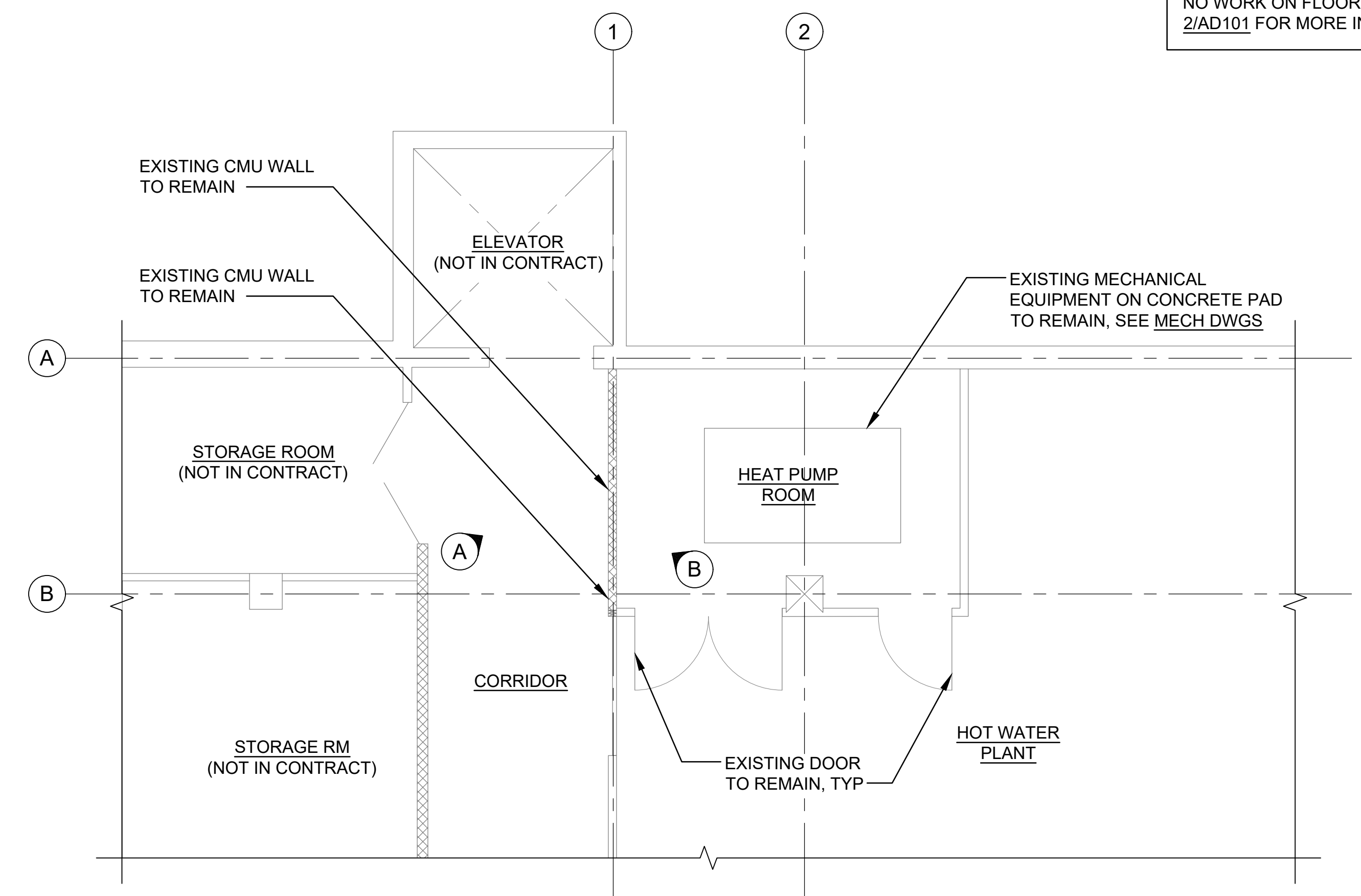


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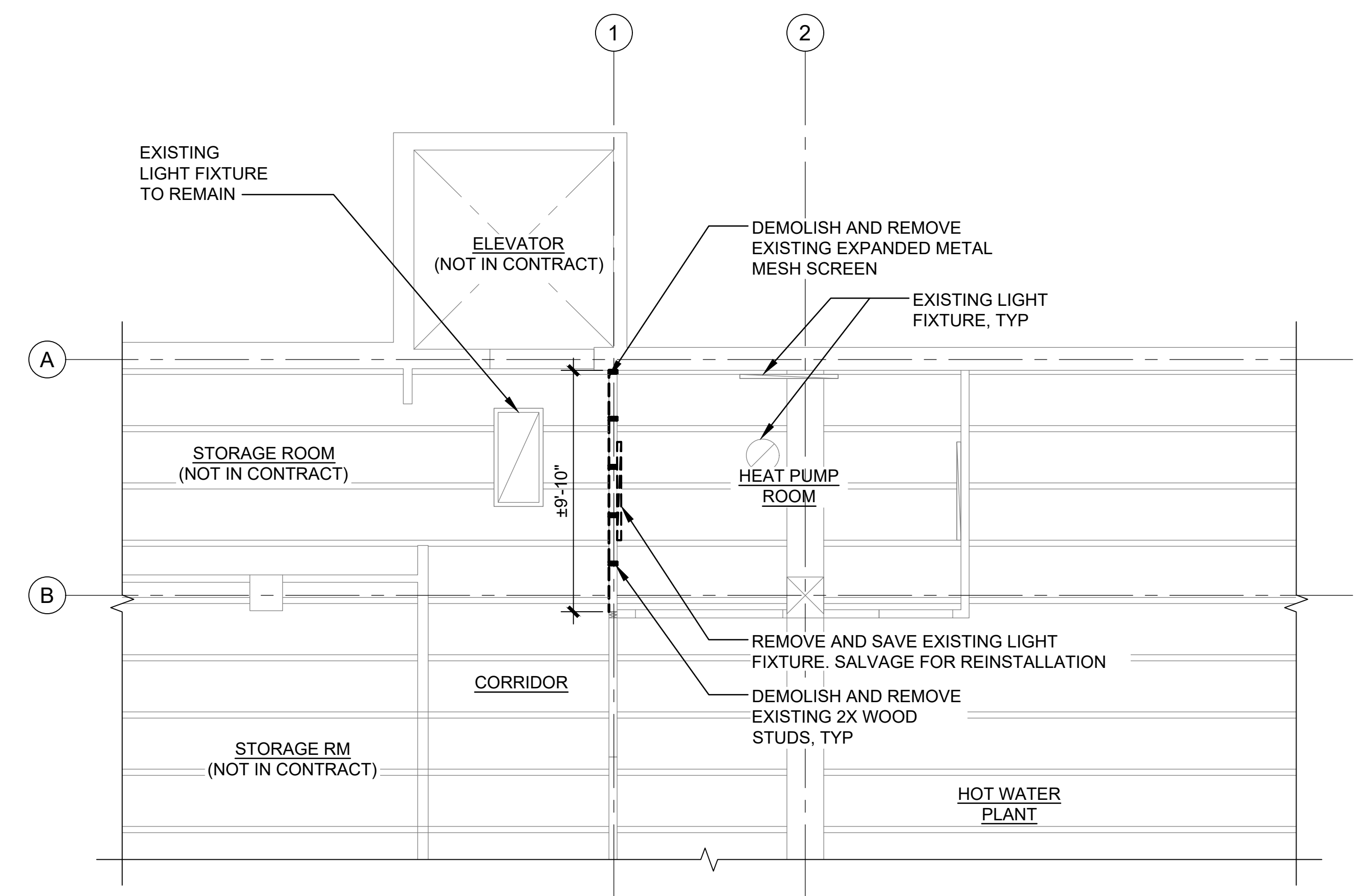
Designed	MM
Drawn	BB
Checked	EA
Date	03-20-26
Job No.	25-165
Sheet	A-003

NOTE:  
NO WORK ON FLOOR PLAN, SEE  
2/AD101 FOR MORE INFORMATION



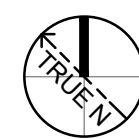
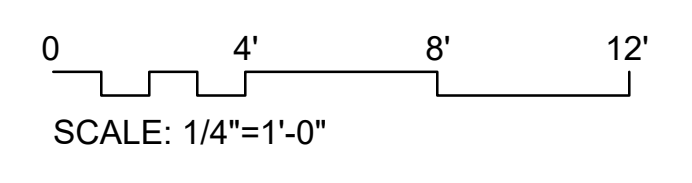
**PARTIAL BASEMENT  
DEMOLITION FLOOR PLAN**

1  
AD101 SCALE: 1/4" = 1'-0"



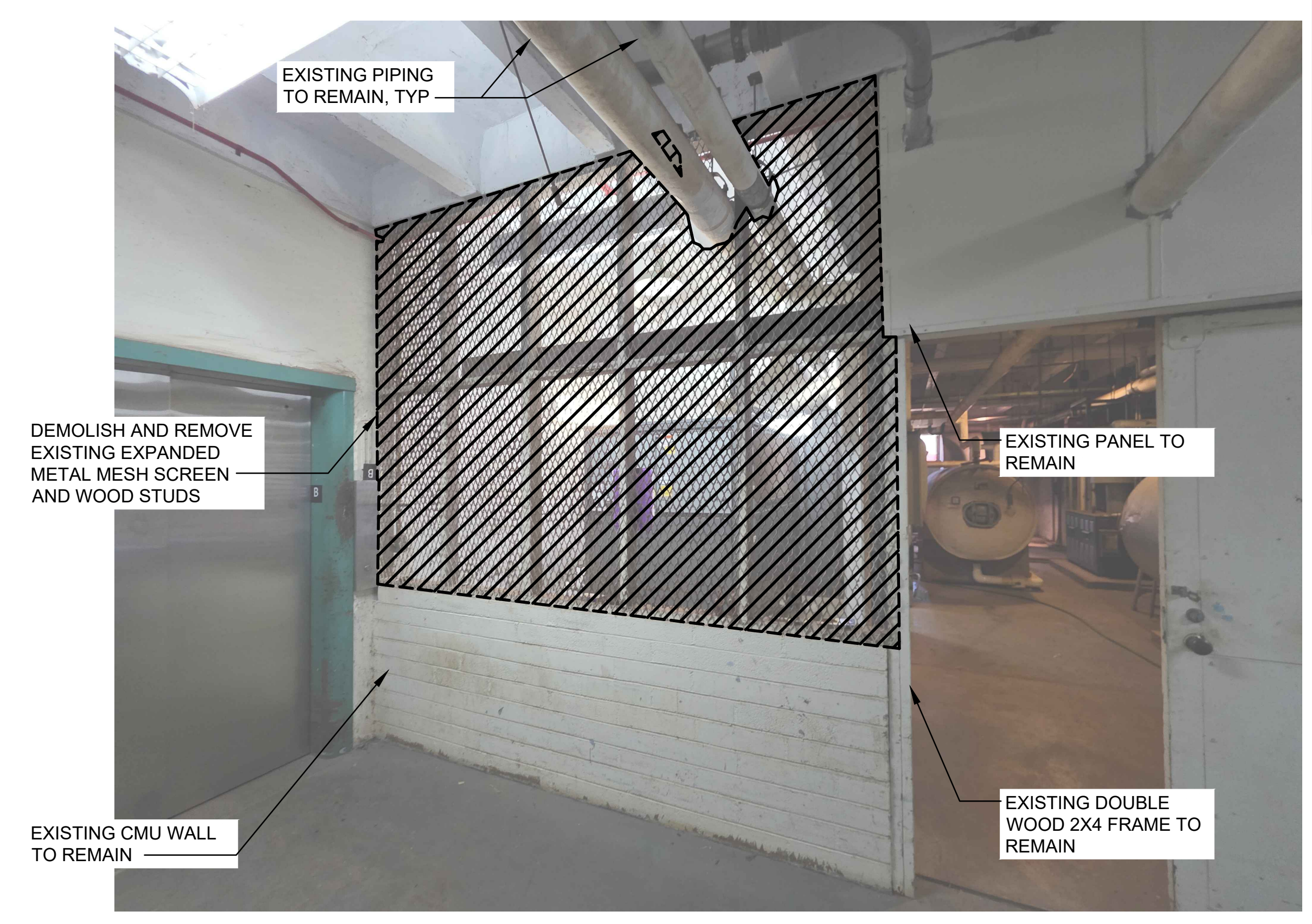
**PARTIAL BASEMENT DEMOLITION  
REFLECTED CEILING PLAN**

2  
AD101 SCALE: 1/4" = 1'-0"

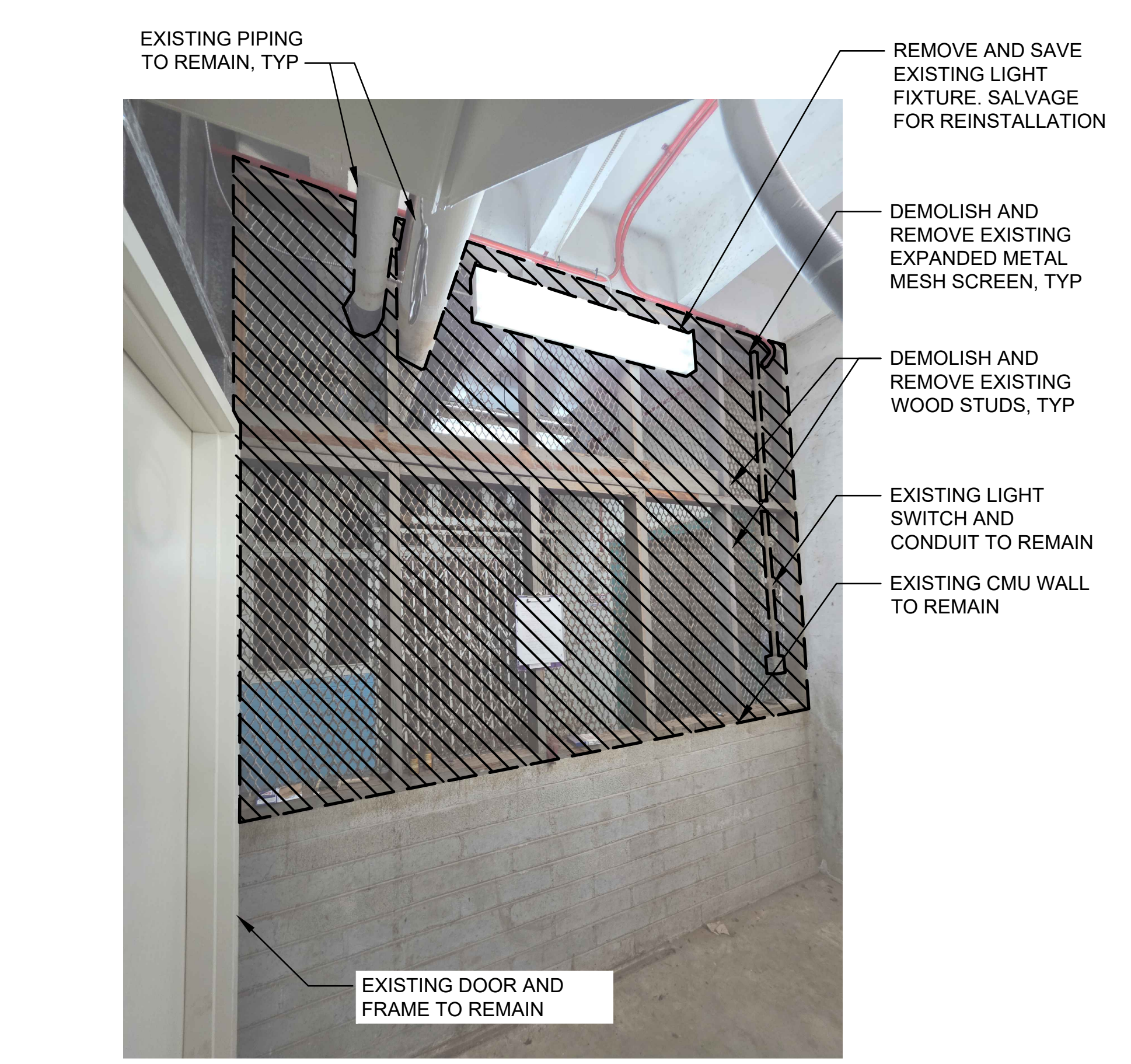


**DEMOLITION PHOTOS**

3  
AD101 SCALE: NOT TO SCALE



A

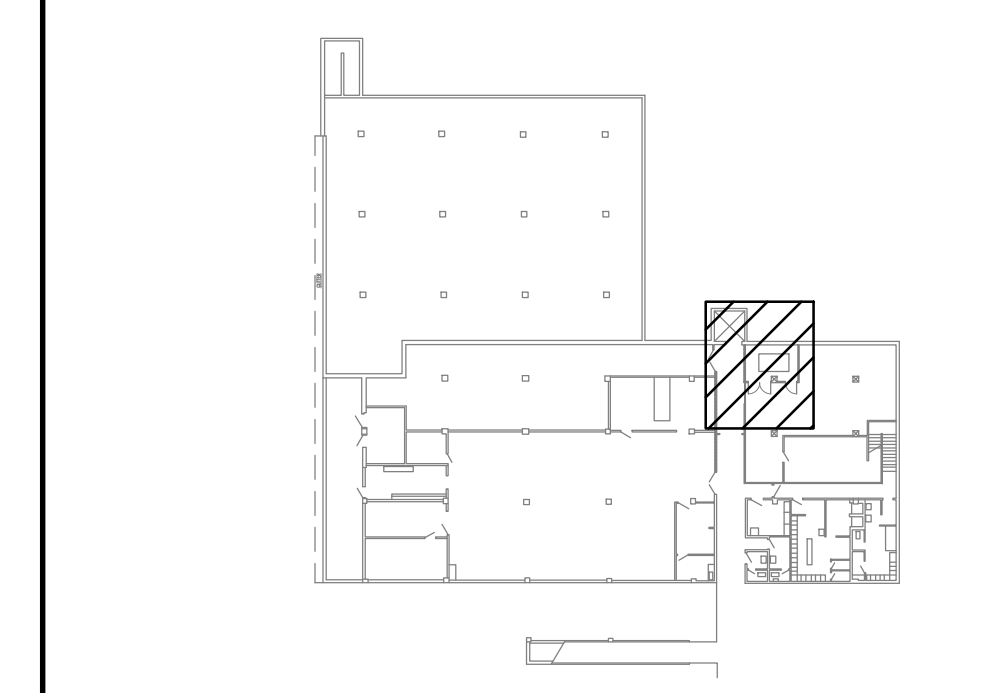


B

**LEGEND**

- EXISTING WALL TO REMAIN
- EXISTING CMU WALL TO REMAIN
- ITEMS TO BE DEMOLISHED
- EXISTING LIGHT FIXTURES TO REMAIN

**KEY PLAN**



REVISIONS	BY

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SCOTT R. J. HARADA  
LICENSED PROFESSIONAL ARCHITECT  
No. 14637  
HAWAII, U.S.A.

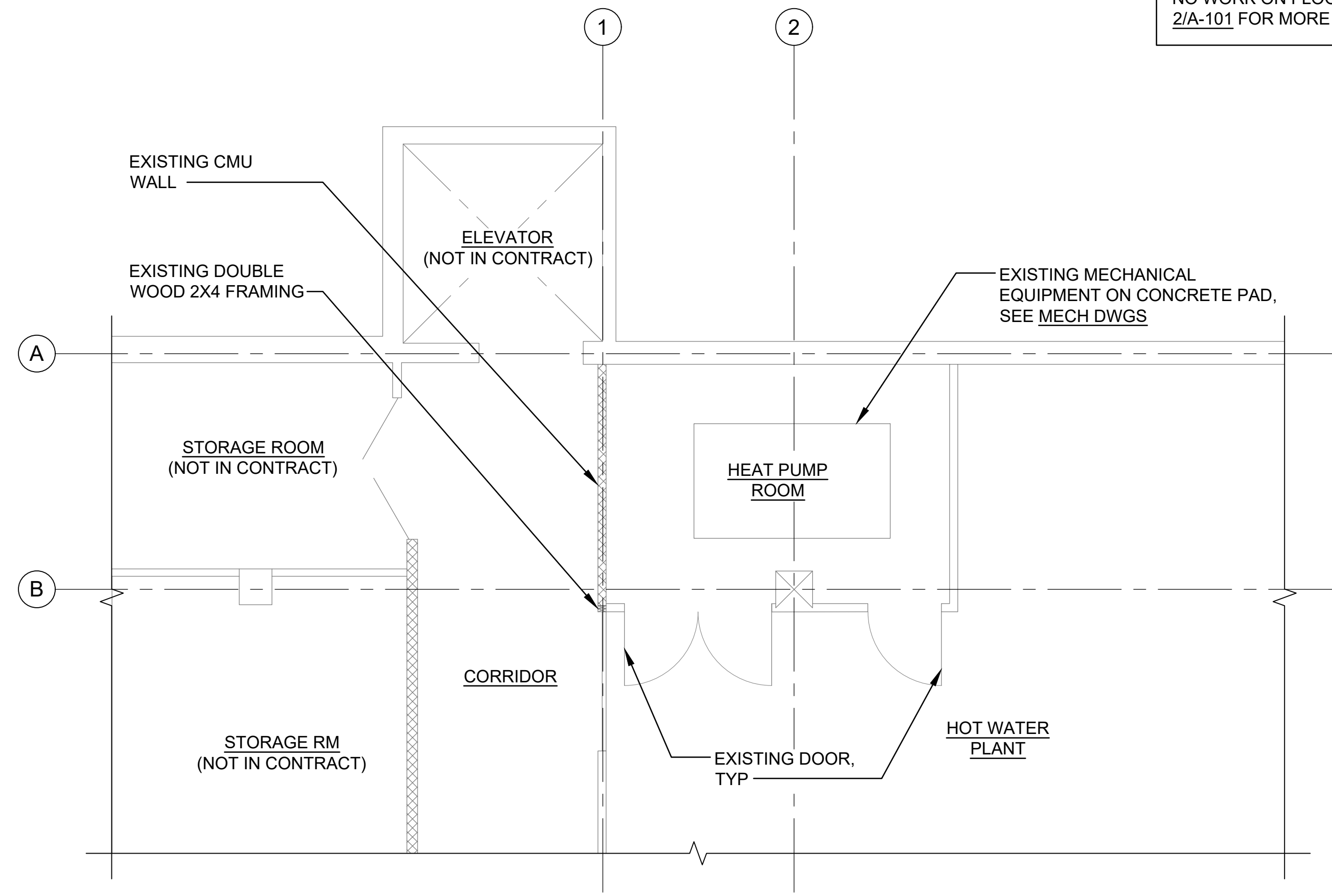
EXPIRATION DATE 04/30/2026

**INSYNERGY ENGINEERING**  
MECHANICAL • ELECTRICAL • FIRE PROTECTION  
1001 BISHOP ST. SUITE 2500, HONOLULU, HAWAII 96813  
Phone: (808) 521-3773 Fax: (808) 521-3993

**LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION**  
3675 KILAUEA AVE HONOLULU, HAWAII 96816  
TMK:  
PARTIAL BASEMENT DEMOLITION FLOOR AND REFLECTED CEILING PLAN AND DEMOLITION PHOTOS

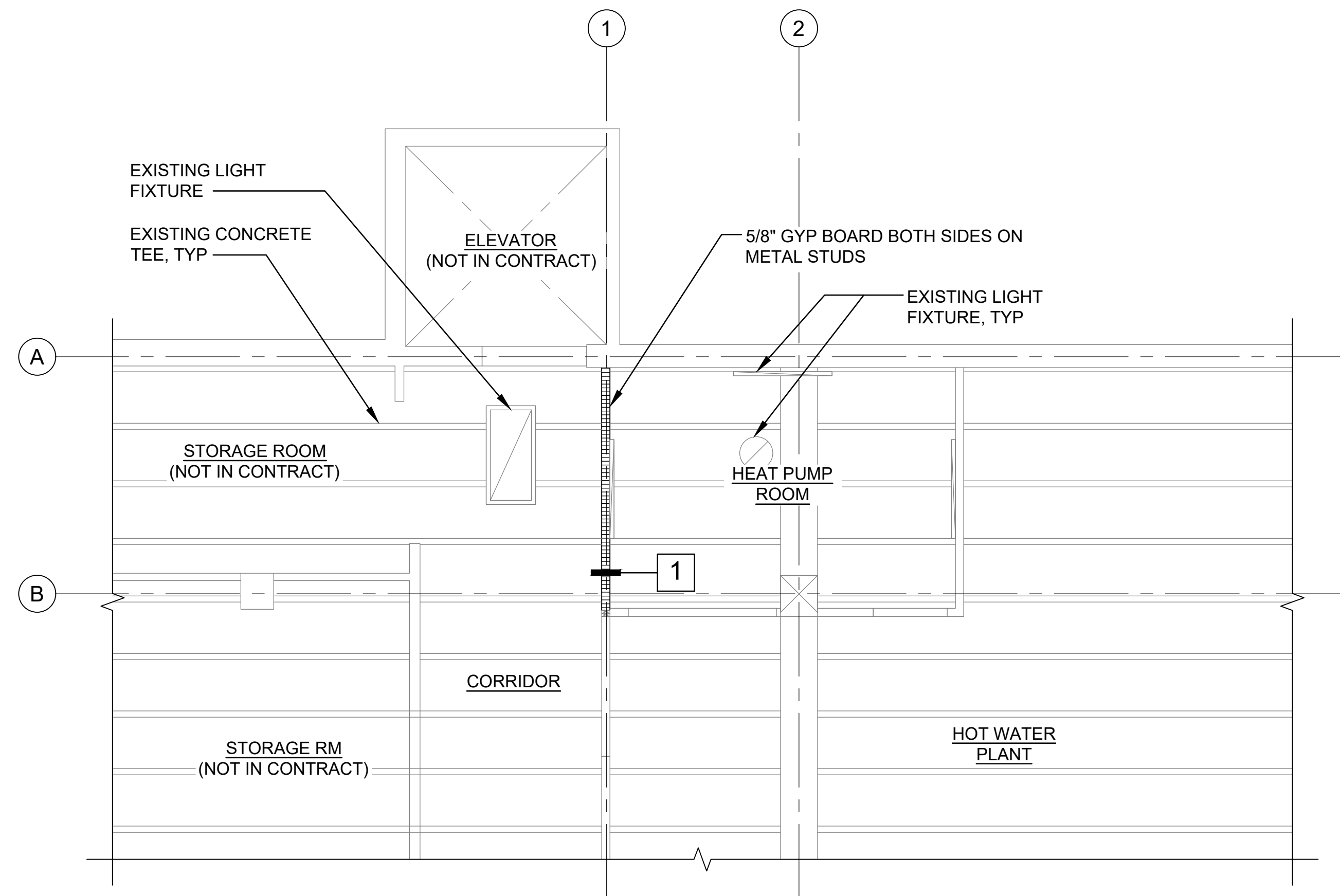
Designed	MM
Drawn	BB
Checked	INK
Date	03-20-26
Job No.	25-165
Sheet	AD101
Of 5 Sheets 15	

NOTE:  
NO WORK ON FLOOR PLAN, SEE  
2/A-101 FOR MORE INFORMATION



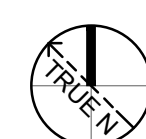
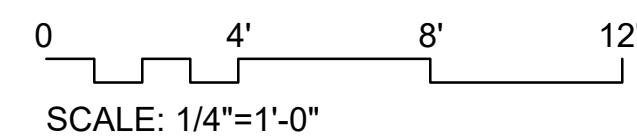
1 PARTIAL BASEMENT FLOOR PLAN

A-101 SCALE: 1/4" = 1'-0"



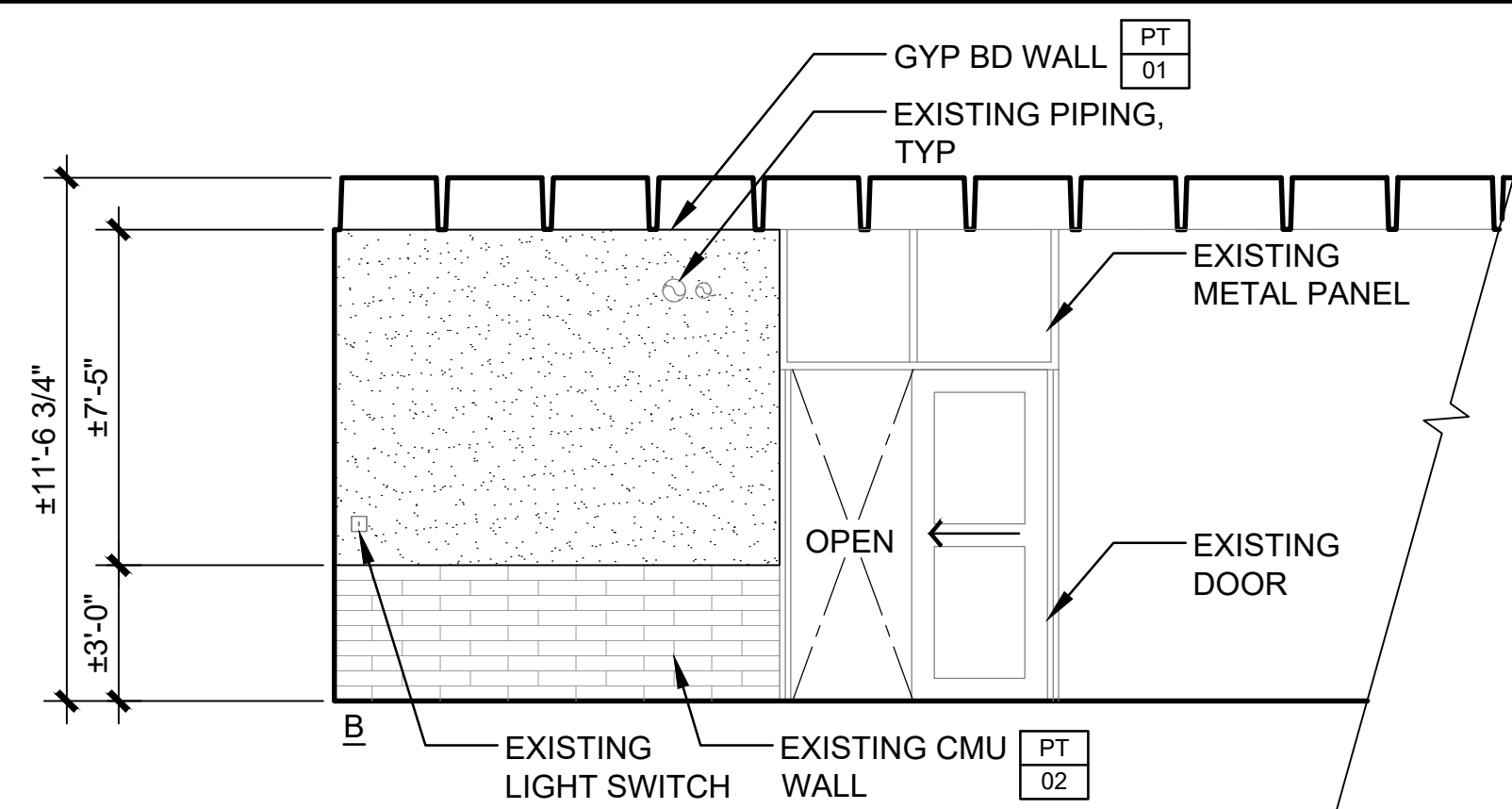
2 PARTIAL BASEMENT REFLECTED CEILING PLAN

A-101 SCALE: 1/4" = 1'-0"



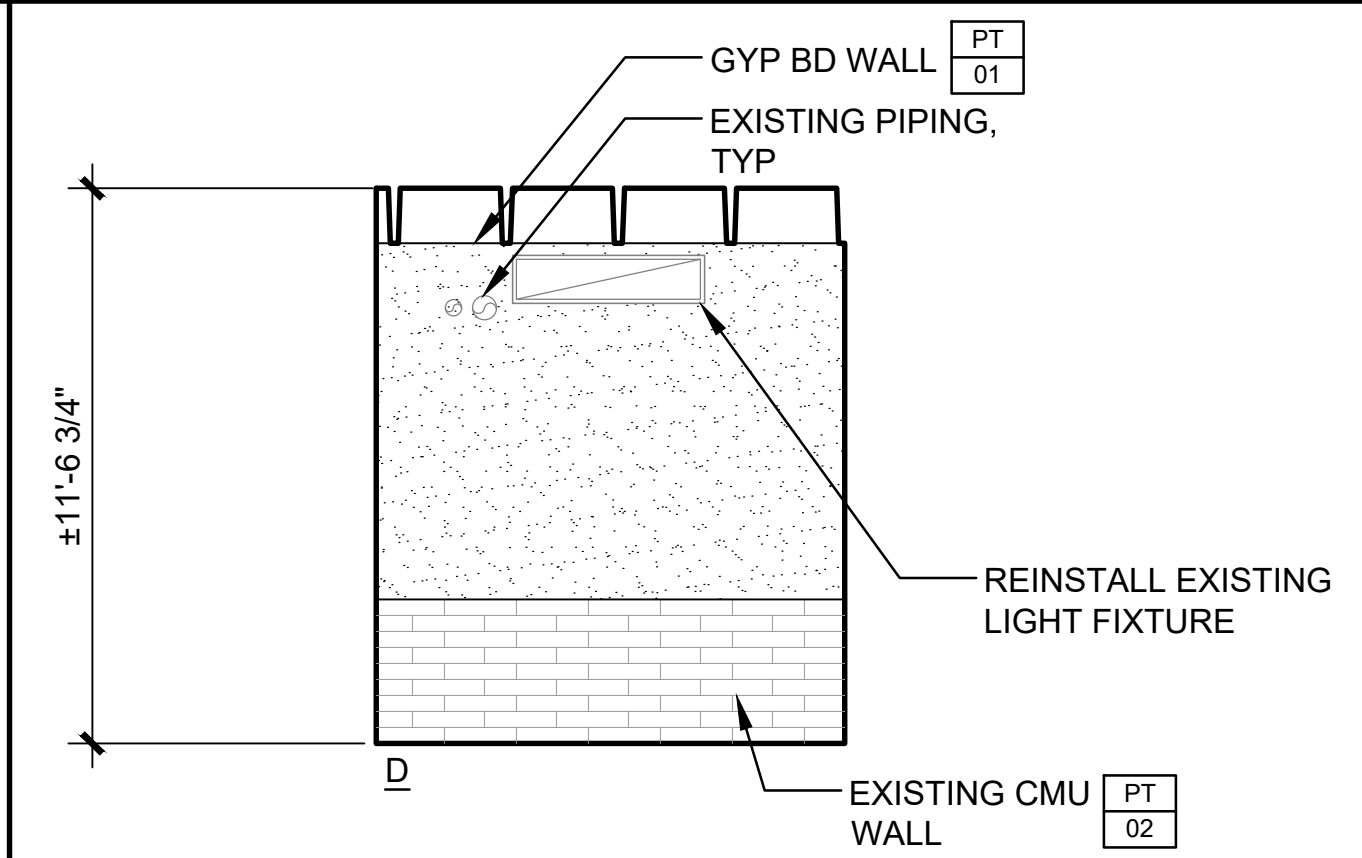
MATERIAL INDEX SCHEDULE

CODE	MATERIAL	MANUFACTURER	MODEL/SIZE	COLOR	OPTIONS	LOCATIONS	REMARKS
PT-01	PAINT	SEE SPECS	SEE SPECS	MATCH EXISTING	SEMI-GLOSS	INTERIOR GYP BD WALLS	-
PT-02	PAINT	SEE SPECS	SEE SPECS	MATCH EXISTING	SEMI-GLOSS	INTERIOR CMU WALLS	-



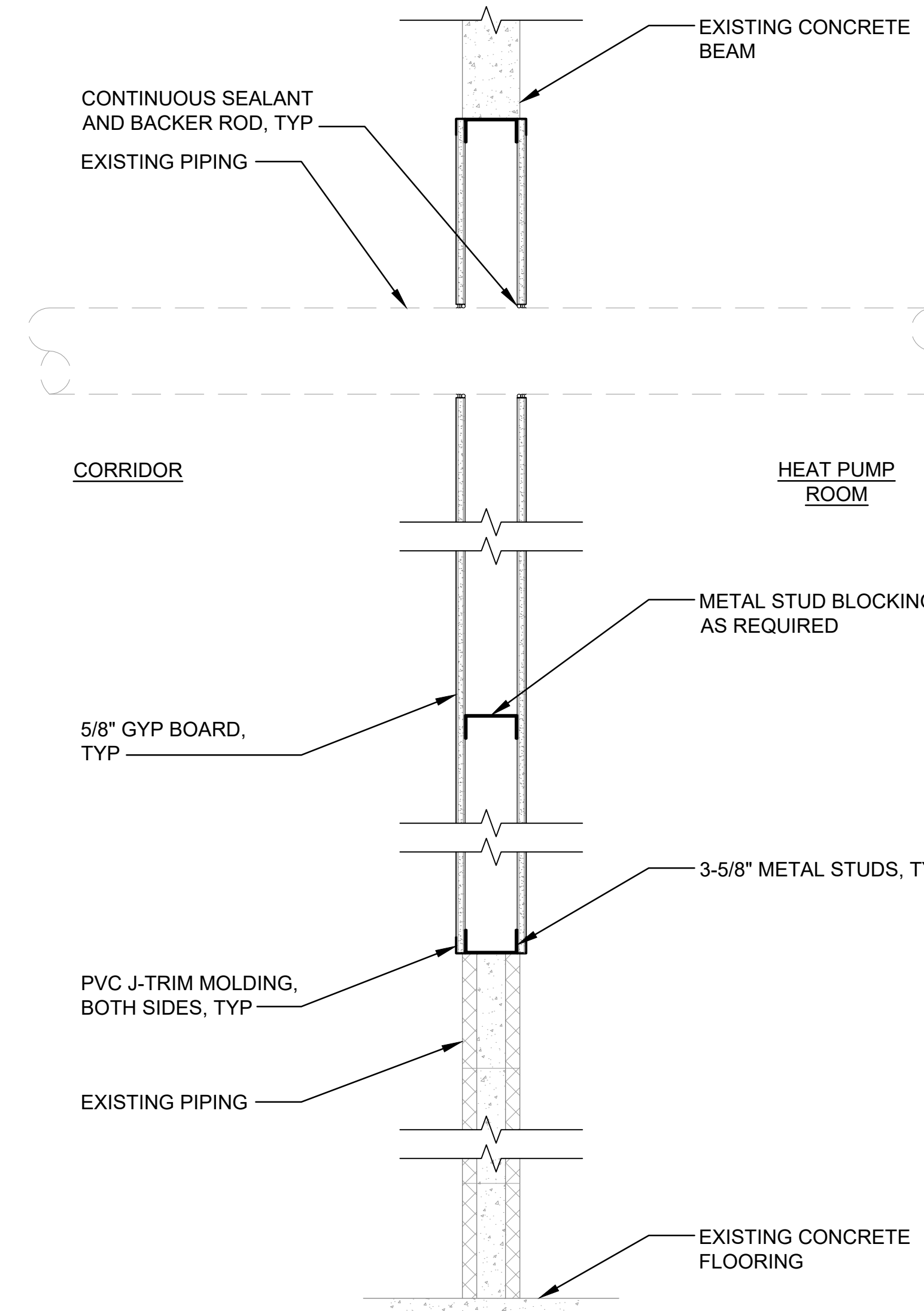
3 INTERIOR ELEVATION - CORRIDOR

A-101 SCALE: 1/4" = 1'-0"



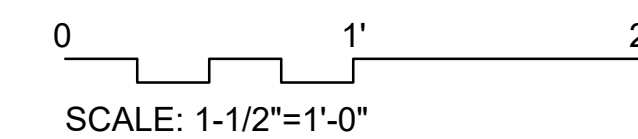
4 INTERIOR ELEVATION - HEAT PUMP ROOM

A-101 SCALE: 1/4" = 1'-0"



5 PARTITION TYPE 1 STC: 35

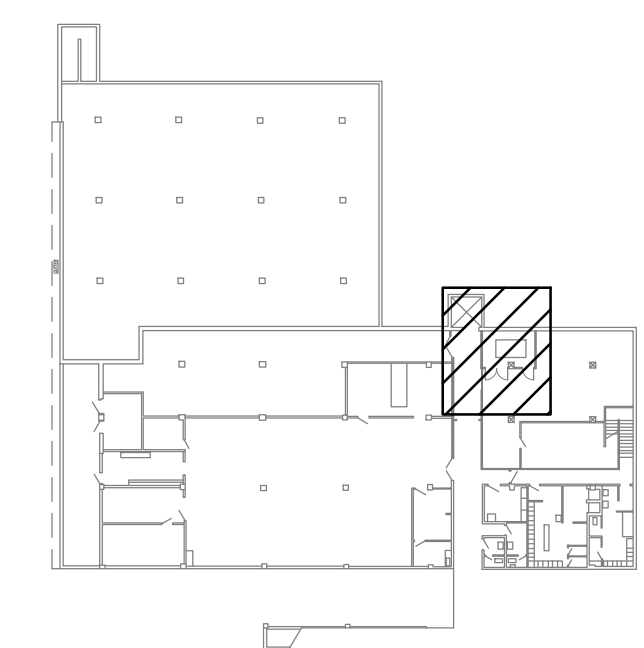
A-101 SCALE: 1-1/2" = 1'-0"



LEGEND

- # WALL PARTITION TYPE, SEE DETAIL 5/A-101
- EXISTING WALL TO REMAIN
- ▨ EXISTING CMU WALL TO REMAIN
- - - ITEMS TO BE DEMOLISHED
- ⊙ EXISTING LIGHT FIXTURES TO REMAIN

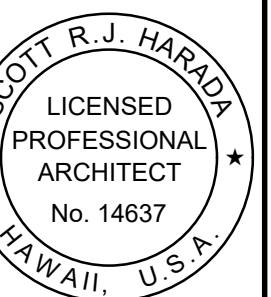
KEY PLAN



REVISIONS BY

NO.	DESCRIPTION	BY

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SCOTT R. J. HARADA  
EXPIRATION DATE 04/30/2026



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**LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION**  
3675 KILAUEA AVE HONOLULU, HAWAII 96816  
TMK:  
PARTIAL BASEMENT FLOOR AND REFLECTED CEILING  
PLAN, INTERIOR ELEVATIONS, SCHEDULES, AND DETAILS

Designed MM  
Drawn BB  
Checked INK  
Date 03-20-26  
Job No. 25-165  
Sheet

A-101

Of 6 Sheets 15

MECHANICAL LEGEND		
SYMBOL	ABBRV.	DESCRIPTION
	CFM	CUBIC FEET PER MINUTE
	DBA	DECIBEL
	(E)	EXISTING
	E.S.P.	EXTERNAL STATIC PRESSURE
	FT	FEET
	HZ	HERTZ (CYCLES PER SECOND)
	IN	INCHES
	MAX	MAXIMUM
	MIN	MINIMUM
	(N)	NEW
	SHT	SHEET
	TYP	TYPICAL

**GENERAL NOTES:**

- EXAMINE THE PROJECT SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND THE EXTENT OF REMOVAL, RELOCATION, RECONNECTION AND/OR NEW WORK PRIOR TO BIDDING. NOTIFY AND COORDINATE WITH ENGINEER FOR ANY MAJOR DEVIATIONS DUE TO UNFORESEEN OR VARYING FIELD CONDITIONS. BID SUBMISSION SHALL BE CONSIDERED AS EVIDENCE THAT THE SUBCONTRACTOR HAS VISITED THE SITE AND HAS RESOLVED ALL DISCREPANCIES AND QUESTIONS AND NO EXTRA PAYMENT WILL BE AUTHORIZED FOR WORK MADE NECESSARY BY THE SUBCONTRACTOR'S FAILURE TO DO SO.
- THE ENTIRE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE BUILDING CODE OF THE CITY AND COUNTY OF HONOLULU, STATE DEPARTMENT OF HEALTH REGULATIONS, 2018 UNIFORM PLUMBING CODE, UNIFORM FIRE CODE, NATIONAL FIRE PROTECTION AGENCY 1 2021, NATIONAL ELECTRICAL CODE, ASME PRESSURE PIPING CODE, HAWAII STATE MODEL ENERGY CODE, AND ALL OTHER AGENCIES HAVING JURISDICTION.
- THE DRAWING AND SPECIFICATION ARE INTENDED TO COVER THE COMPLETED INSTALLATION OF SYSTEMS TO FUNCTION AS DESCRIBED AND SPECIFIED. THE OMISSION OF REFERENCE TO ANY NECESSARY ITEM OF LABOR OR MATERIAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH LABOR AND MATERIAL FOR COMPLETE AND SATISFACTORY OPERATING SYSTEMS.
- ALL EQUIPMENT SHALL BE CAPABLE OF FITTING INTO THE SPACES ALLOCATED WHILE MEETING THE MANUFACTURER'S RECOMMENDED ACCESS REQUIREMENTS. REVIEW ALL SPACES WHERE EQUIPMENT IS TO BE INSTALLED PRIOR TO ORDERING OF EQUIPMENT AND NOTIFY THE CONTRACTING OFFICER OF ANY INADEQUATE CLEARANCES OR CONDITIONS THAT WILL PREVENT THE PROPER INSTALLATION, MAINTENANCE, AND OPERATION OF THE EQUIPMENT.
- PROVIDE SHOP DRAWING FOR THE LAYOUT OF EQUIPMENT, PIPING, AND DUCTWORK SHOWING COORDINATION OF ALL WORK WITH ALL OTHER TRADES, INCLUDING PLUMBING, FIRE SPRINKLER, FIRE ALARM, CONTROLS, ELECTRICAL, AND COMMUNICATION SYSTEMS. COORDINATION DRAWING SHALL OVERLAY HVAC, PLUMBING, FIRE SPRINKLER, ELECTRICAL, AND FIRE ALARM SYSTEMS, AND ALL CONFLICTS BETWEEN TRADES SHALL BE NOTED AND RESOLVED.
- VERIFY AND COORDINATE ALL ROOF, WALL, AND FLOOR PENETRATIONS PRIOR TO THE START OF CONSTRUCTION.
- OBTAIN APPROVAL FROM THE ENGINEER BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS, WALLS, AND SLABS.
- DRAWINGS DO NOT ATTEMPT TO SHOW EXACT DETAILS OF PIPING AND DUCTWORK. PROVIDE OFFSETS AS NECESSARY TO AVOID LOCAL OBSTRUCTIONS OR INTERFERENCE WITH OTHER TRADES. REVIEW ALL PIPING AND DUCT RUN PRIOR TO FABRICATION AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY INTERFERENCE AND/OR LACK OF ADEQUATE CLEARANCES.
- SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH AS CHANGES ON THE AS-BUILT DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE APPROVED BY THE CONTRACT DOCUMENTS, SUBMIT SHOP DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE ENGINEER FOR REVIEW. DO NOT PROCEED UNTIL REVIEWED.
- PROPERLY FIRESTOP ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR PARTITIONS WITH A UL APPROVED SYSTEM APPROPRIATE FOR PENETRATION TYPE AND FIRE RATING. FIRESTOP ALL PENETRATIONS BETWEEN FLOORS.
- SEISMICALLY BRACE ALL EQUIPMENT, PIPING, AND DUCTWORK IN ACCORDANCE WITH THE CURRENT CITY AND COUNTY OF HONOLULU BUILDING CODE FOR THE SEISMIC ZONE 2A.
- ROUTE ALL CONTROL AND MOTOR STARTER WIRING IN CONDUIT. ANY CONDUIT SHALL BE APPROVED PRIOR TO INSTALLATION.
- CONTRACTOR SHALL RESTORE ALL EXISTING CONSTRUCTION IMPACTED BY NEW WORK TO ITS ORIGINAL CONDITION OR BETTER. PAINT ALL NEW WORK AND ALL AREAS AFFECTED BY THE CONTRACTOR'S WORK TO MATCH ADJACENT SURFACES.
- CONTRACTOR SHALL MINIMIZE HOT WATER OUTAGE DURATION AND COORDINATE WITH LEAHI.

**MECHANICAL TECHNICAL SPECIFICATIONS  
MECHANICAL AIR CONDITIONING AND VENTILATION  
PART 2 - PRODUCTS**

**2.1 MATERIALS**

ALL MATERIALS DELIVERED TO THE JOB SITE AND INSTALLED SHALL BE NEW, BEST OF THEIR RESPECTIVE GRADES AND AS SPECIFIED ON THE DRAWINGS. MATERIALS SHALL BE OF THE SAME BRAND OR MANUFACTURER THROUGHOUT FOR EACH CLASS OF MATERIAL OR EQUIPMENT.

**2.2 DUCTWORK AND ACCESSORIES**

SHEET METAL DUCTWORK: GALVANIZED STEEL SHEETS, ASTM A527. CONSTRUCTION, GAGES, AND REINFORCEMENT SHALL COMPLY WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS, 1985 EDITION.

FITTINGS: VANED ELBOWS, TAKE-OFFS, BRANCH CONNECTIONS, TRANSITIONS, VOLUME DAMPERS, AND FLEXIBLE CONNECTIONS SHALL COMPLY WITH SMACNA STANDARDS. PROVIDE RADIUS TYPE ELBOWS WITH A CENTERLINE RADIUS OF 1.5 TIMES THE WIDTH OR DIAMETER OF THE DUCT WHERE SPACE PERMITS. OTHERWISE, ELBOWS HAVING A MINIMUM RADIUS EQUAL TO THE WIDTH OR DIAMETER OF THE DUCT OR SQUARE ELBOWS WITH FACTORY FABRICATED TURNING VANES ARE ALLOWED.

TURNING VANES: CURVED BLADES OF GALVANIZED SHEET STEEL, SUPPORT WITH BARS PERPENDICULAR TO BLADES SET; SET INTO VANE RUNNERS SUITABLE FOR DUCT MOUNTING. COMPLY WITH SMACNA'S HVAC DUCT CONSTRUCTION STANDARDS. VANES SHALL BE SINGLE WALL FOR DUCTS UP TO 48 INCHES WIDE AND DOUBLE WALL FOR LARGER DIMENSIONS.

SEALANTS: PROVIDE SEALANTS AND GASKETS THAT HAVE A MAXIMUM FLAME-SPREAD INDEX OF 25 AND A MAXIMUM SMOKE-DEVELOPED INDEX OF 50 WHEN TESTED ACCORDING TO UL 723. DO NOT USE PRESSURE SENSITIVE TAPE AS A SEALANT.

**2.3 SUPPORTS**

GALVANIZED STEEL STRAPS OR HANGER RODS IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS.

**2.4 GRILLES**

FRAME: ALUMINUM OR GALVANIZED STEEL.

BLADES: ALUMINUM OR STEEL, FIXED OR ADJUSTABLE.

FINISH: MANUFACTURER'S STANDARD BAKED ENAMEL, POWDER COAT, OR AS SCHEDULED.

2.6: AIR-SOURCE HEAT PUMP: THE HEAT PUMP WATER HEATER SHALL BE PACKAGED AIR SOURCE EQUIPMENT, FACTORY ASSEMBLED AND CHARGED. THE HEAT PUMP SHALL BE SUITABLE FOR HEATING POTABLE WATER AND HAVE THE CAPABILITY OF PRODUCING NO LESS THAN 160F WATER, WITH HEATING CAPACITY AND C.O.P. AS INDICATED ON THE DRAWINGS.

1. HEAT PUMP UNIT: HEAT PUMP UNIT SHALL CONSIST OF COMPRESSORS, CONDENSER, EVAPORATOR, HOT WATER CIRCULATING PUMP, PIPING, AND CONTROLS, FACTORY PIPED AND CHARGED. THE HEAT PUMP SHALL CONTAIN THE FOLLOWING COMPONENTS, AND FEATURES:

a. EVAPORATOR: SHALL BE CONSTRUCTED WITH ALUMINUM WAFFLE PLATE FINS MECHANICALLY BONDED TO SEAMLESS COPPER TUBING. ALL COPPER TUBE JOINTS TO BE BRAZED WITH SILVER SOLDER. COILS SHALL HAVE CORROSION INHIBITING COATED FINS AND TYPE 304 STAINLESS STEEL COIL CASINGS AND DRAIN PAN.

b. REFRIGERANT: REFRIGERANT SHALL BE R-513A.

c. EXPANSION VALVE: VALVES SHALL BE SPECIFICALLY DESIGNED FOR HEAT PUMP USE WITH FIELD ADJUSTABLE SUPERHEAT FEATURE. EXPANSION VALVE SHALL HAVE MOP (MAXIMUM OPERATING PRESSURE) TYPE POWER ELEMENT TO EFFECTIVELY LIMIT SATURATED SUCTION TEMPERATURE TO 18C (65F).

d. COMPRESSOR: HERMETIC SCROLL TYPE BY COPELAND CORP., SUITABLE FOR HIGH TEMPERATURE OPERATION WITH R513A REFRIGERANT.

e. COMPRESSOR CONTROLS: COMPRESSOR CONTROLS/ACCESSORIES MUST INCLUDE THE FOLLOWING:

- HIGH AND LOW REFRIGERANT PRESSURE SAFETY SWITCHES
- INDICATOR LIGHTS FOR POWER ON, HOT WATER DEMAND, HIGH PRESSURE FAIL, LOW PRESSURE FAIL
- MULTI-FUNCTION PHASE FAILURE RELAY
- CRANKCASE HEATER AND RELAY

f. CONDENSER: STAINLESS STEEL BRAZED PLATE VENTED DOUBLE WALL TYPE. SINGLE WALL CONDENSER CONSTRUCTION SHALL NOT BE ALLOWED. UL LISTED AND SUITABLE FOR HIGH TEMPERATURE OPERATION WITH POTABLE WATER.

g. REFRIGERANT ACCESSORIES:

- FILTER-DRIERS: NON-REPLACEABLE CORE TYPE
- SIGHT GLASS: MOISTURE INDICATING TYPE

h. ANTI-SHORT CYCLE CONTROL: UNITS SHALL BE FACTORY WIRED TO ALLOW A MAXIMUM OF TWELVE COMPRESSOR STARTS PER HOUR TO PREVENT COMPRESSOR SHORT CYCLING AND ALLOW TIME FOR SUCTION AND DISCHARGE PRESSURES TO EQUALIZE PERMITTING THE COMPRESSOR TO START IN AN UNLOADED CONDITION.

i. HOT WATER CIRCULATING PUMPS: SHALL BE FACTORY INSTALLED IN-LINE ALL BRONZE OR STAINLESS STEEL BODY CENTRIFUGAL TYPE ABLE TO DELIVER RATED FLOW AGAINST THE EXTERNAL HEAD SHOWN ON THE DRAWINGS.

j. CONTROLS: THE HEAT PUMP UNIT SHALL BE FACTORY WIRED FOR FULLY AUTOMATIC OPERATION. SAFETIES SHALL INCLUDE COMPRESSOR MOTOR THERMAL OVERLOAD PROTECTION, MANUAL RESET PRESSURE STATS, ANTI-CYCLING COMPRESSOR RELAYS, PLUS STANDARD ITEMS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

k. CONSTANT LEAVING WATER TEMPERATURE CONTROL: THE HEAT PUMP UNIT SHALL BE FACTORY EQUIPPED WITH ELECTRONIC TEMPERATURE CONTROL VALVE (E-TCV) WHICH AUTOMATICALLY MAINTAINS CONSTANT LEAVING WATER TEMPERATURE REGARDLESS OF ENTERING WATER TEMPERATURE. LEAVING WATER TEMPERATURE IS SET BY THE HEAT PUMP OPERATOR/USER VIA A FIELD ADJUSTABLE ELECTRONIC TEMPERATURE CONTROLLER.

CITY AND COUNTY OF HONOLULU  
REVISED ORDINANCES OF HONOLULU 2021  
CHAPTER 16B

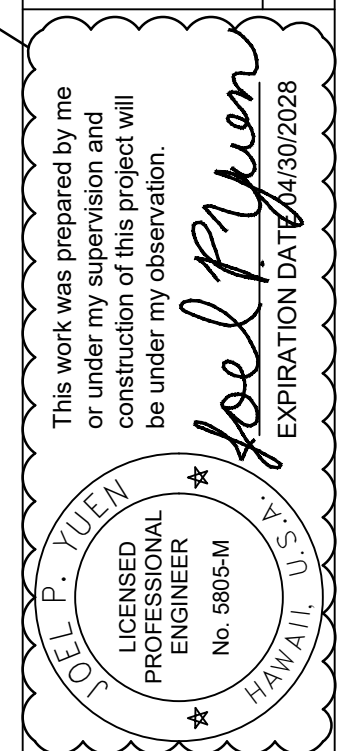
TO THE BEST OF MY KNOWLEDGE, THIS PROJECT'S DESIGN SUBSTANTIALLY CONFORMS TO THE BUILDING ENERGY CONSERVATION CODE FOR:

JOEL P. YUEN  
LICENSED PROFESSIONAL ENGINEER  
No. 5805-M  
HAWAII, U.S.A.

X MECHANICAL COMPONENT SYSTEMS

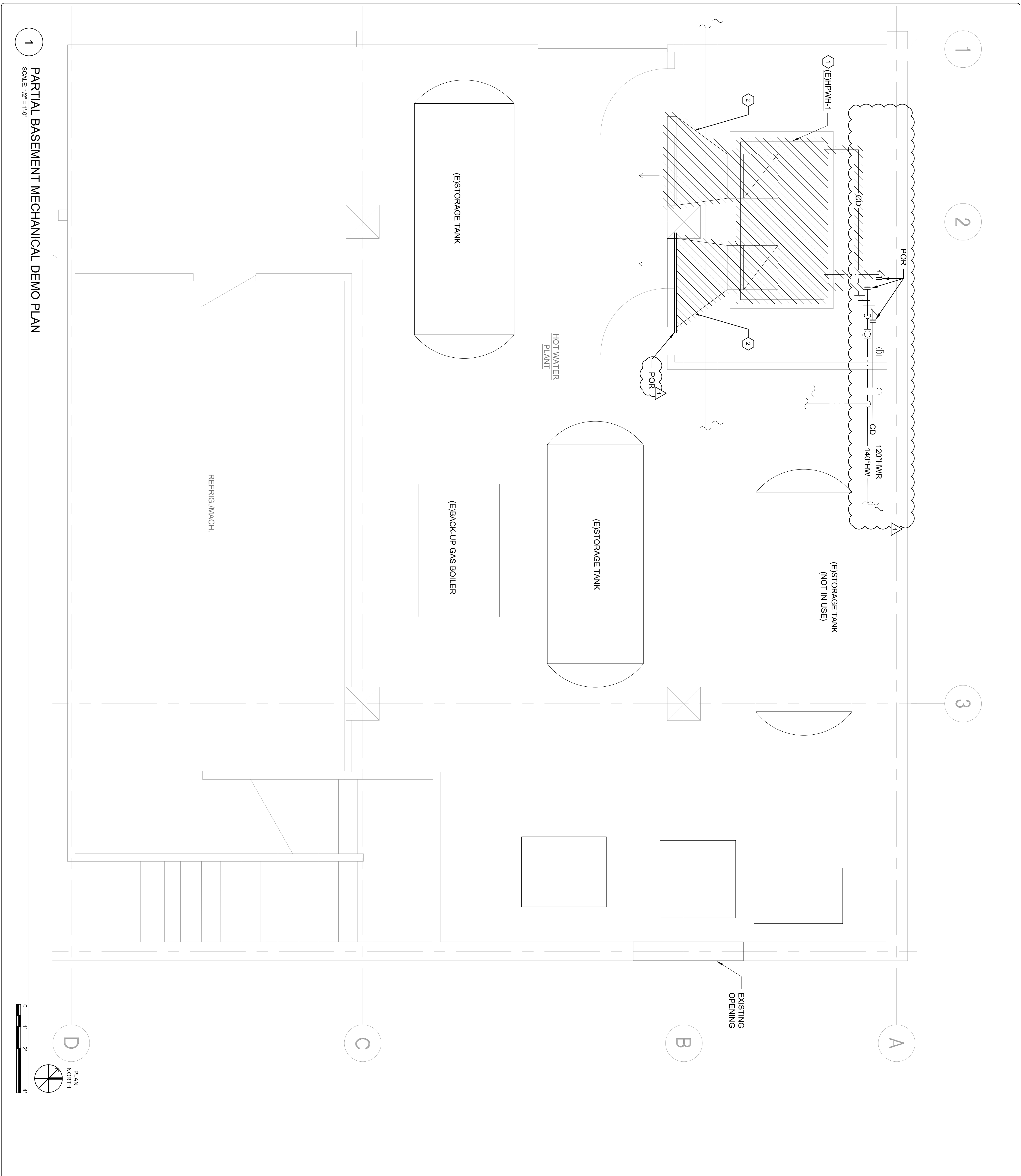
SIGNATURE: Joel P. Yuen DATE: 03/20/2026  
NAME: JOEL P. YUEN  
TITLE: MECHANICAL ENGINEER  
LICENSE No.: 5805-M

REVISIONS	BY
1	JY
ADD 1	
03/26/2026	



LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION  
3675 KILAUEA AVE HONOLULU, HAWAII 96816  
MECHANICAL GENERAL NOTES, LEGEND AND SPECIFICATIONS

Designed	KT
Drawn	RB
Checked	JY
Date	03-20-2026
Job No.	25-165
Sheet	M-001
of 7 Sheets	



**SHEET KEYNOTES**

- 1 DEMO EXISTING HEAT PUMP AND ASSOCIATED PIPING, WIRING AND CONTROLS.
- 2 DEMO EXISTING EVAPORATOR DISCHARGE DUCTWORK.

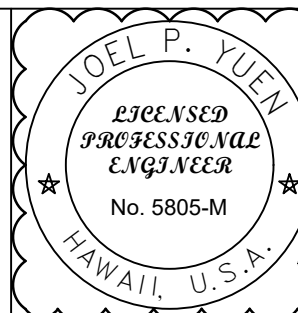
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ADD 1

103/26/2026

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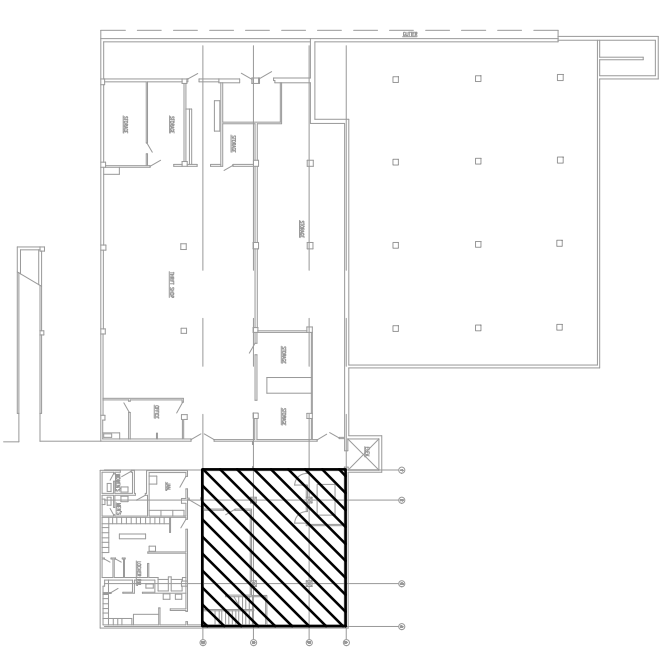
**LEAHI HOSPITAL SINCLAIR BUILDING HEAT PUMP SOUND ATTENUATION**

3675 KILAUEA AVE HONOLULU, HAWAII 96816

TMK:

PARTIAL BASEMENT MECHANICAL DEMO PLAN

**KEY PLAN**



Sheet

**MD101**

of 8 Sheets

15

Checked

JY

Date

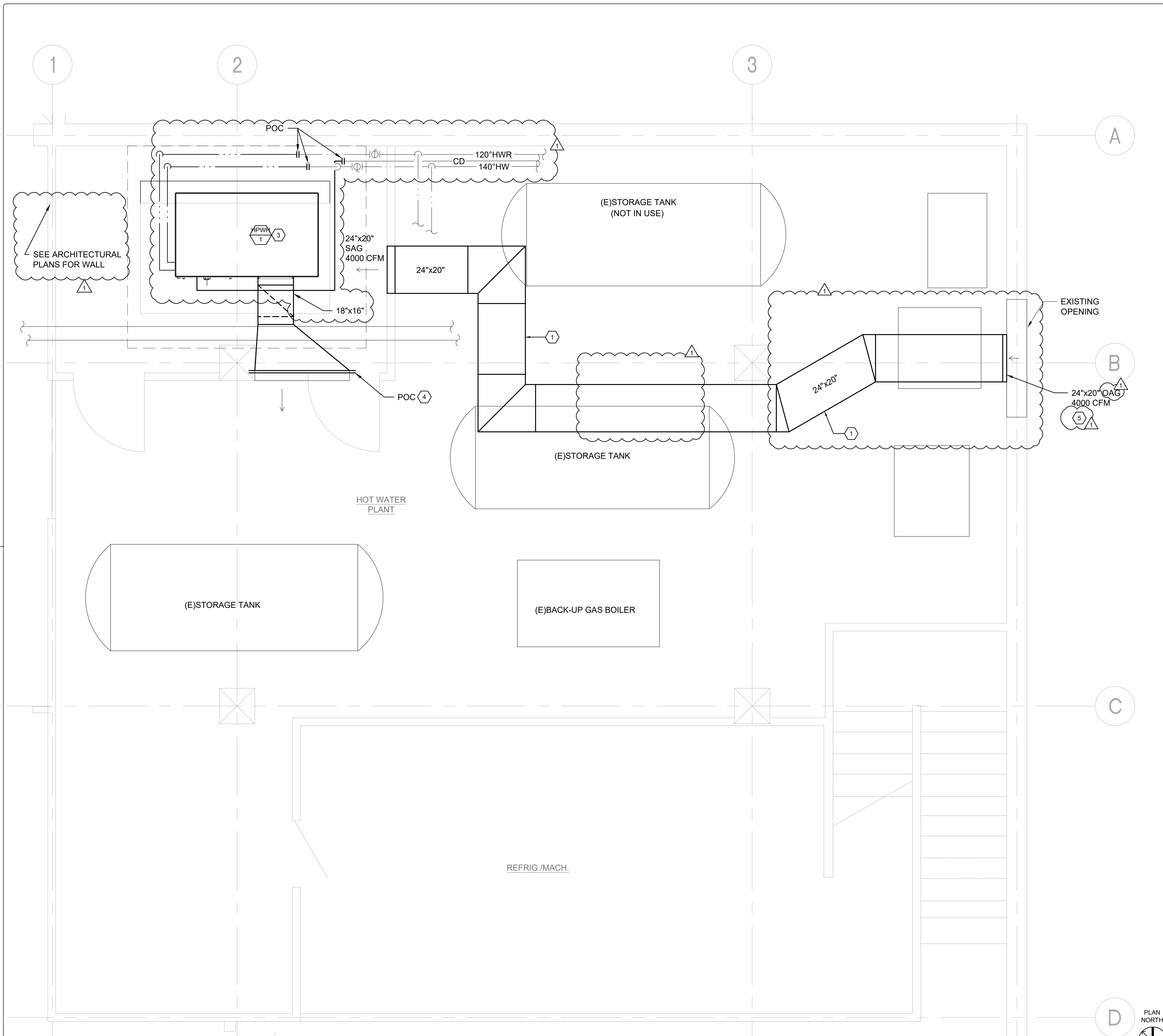
03-20-2026

Drawn

RB

Designed

KT



**SHEET KEYNOTES**

- 1 PROVIDE NEW DUCTWORK AND ASSOCIATED APPURTENANCES.
- 3 PROVIDE NEW HEAT PUMP AND ASSOCIATED PIPING WIRING AND CONTROLS. EXPAND THE EXISTING HOUSEKEEPING PAD AS NECESSARY. RECONNECT TO EXISTING HOT WATER AND HOT WATER RETURN AND CONDENSATE PIPING.
- 4 RECONNECT TO EXISTING EVAPORATOR DISCHARGE DUCTWORK MODIFY AS NECESSARY.
- 5 CENTER DUCT TO EXISTING OPENING.

REVISIONS	BY
1 ADD 1	JY
03/26/2026	

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*Joel P. Yuen*

MECHANICAL ENGINEER  
No. 9805-M  
HAWAII

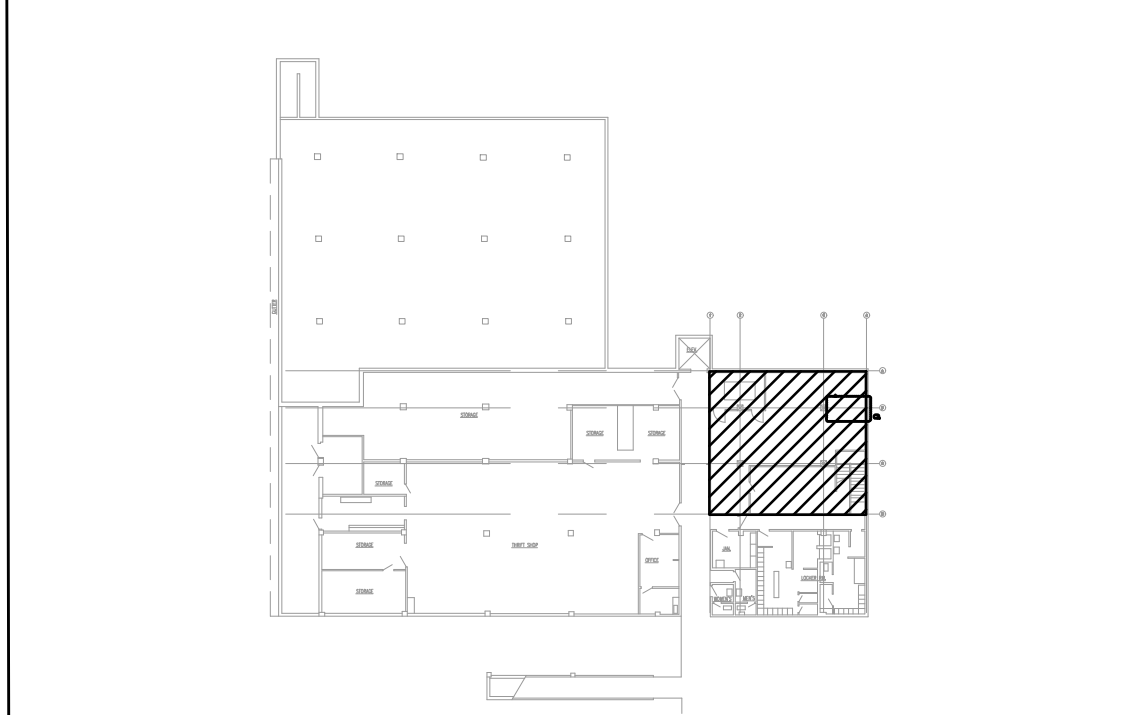
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Phone: (808) 521-3773 Fax: (808) 521-3993

**KEY PLAN**



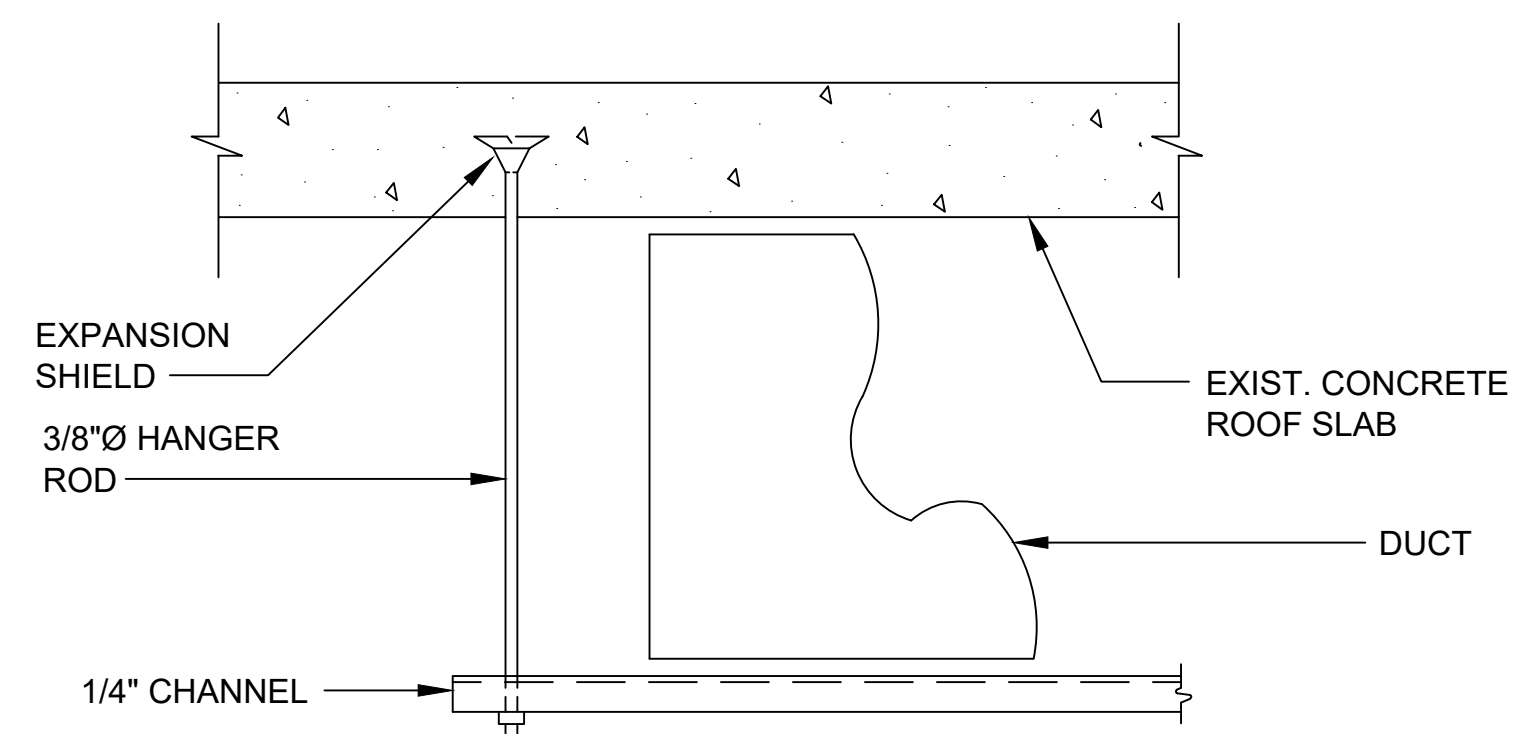
**LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION**

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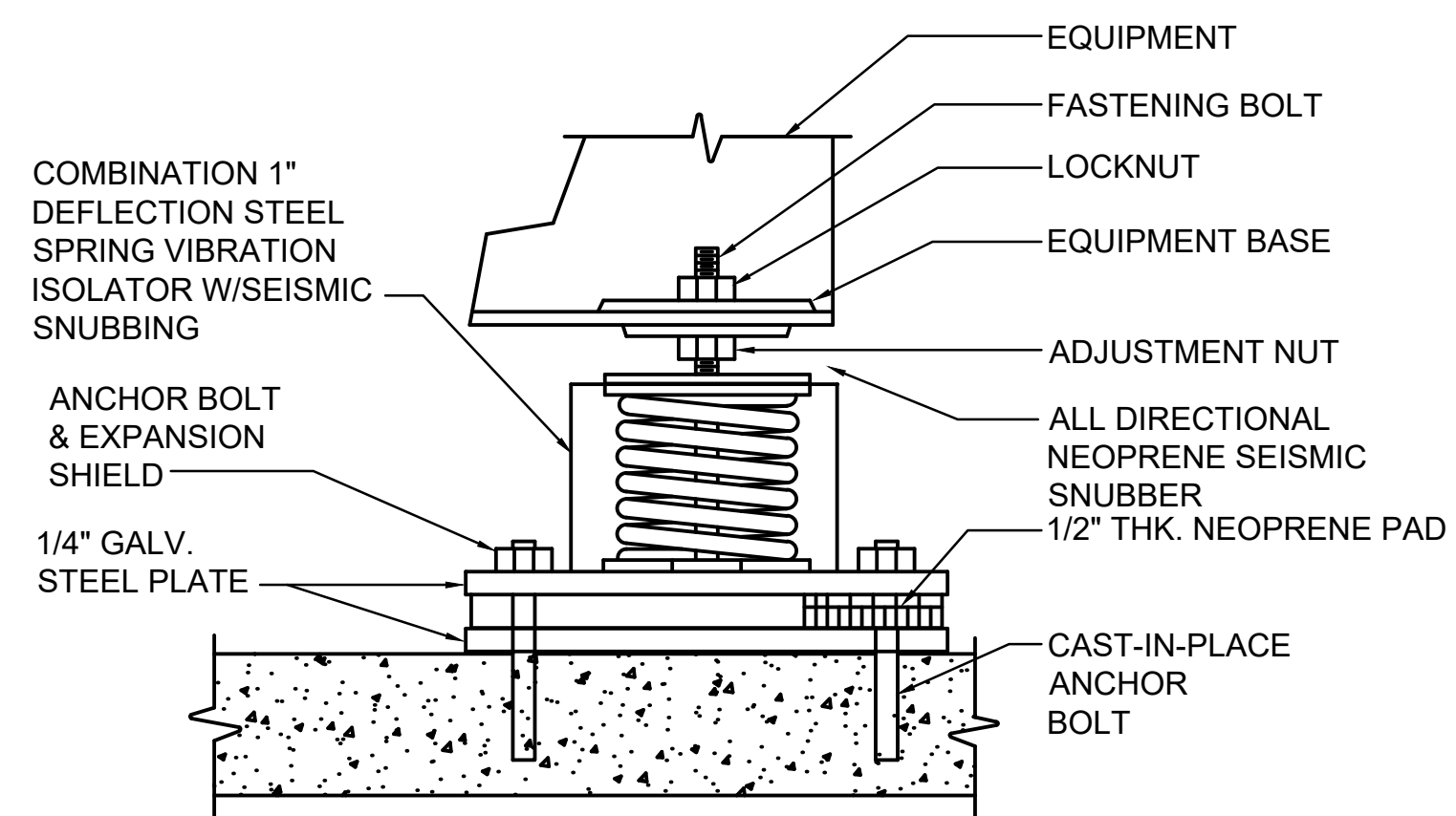
TMMK

PARTIAL BASEMENT MECHANICAL PLAN

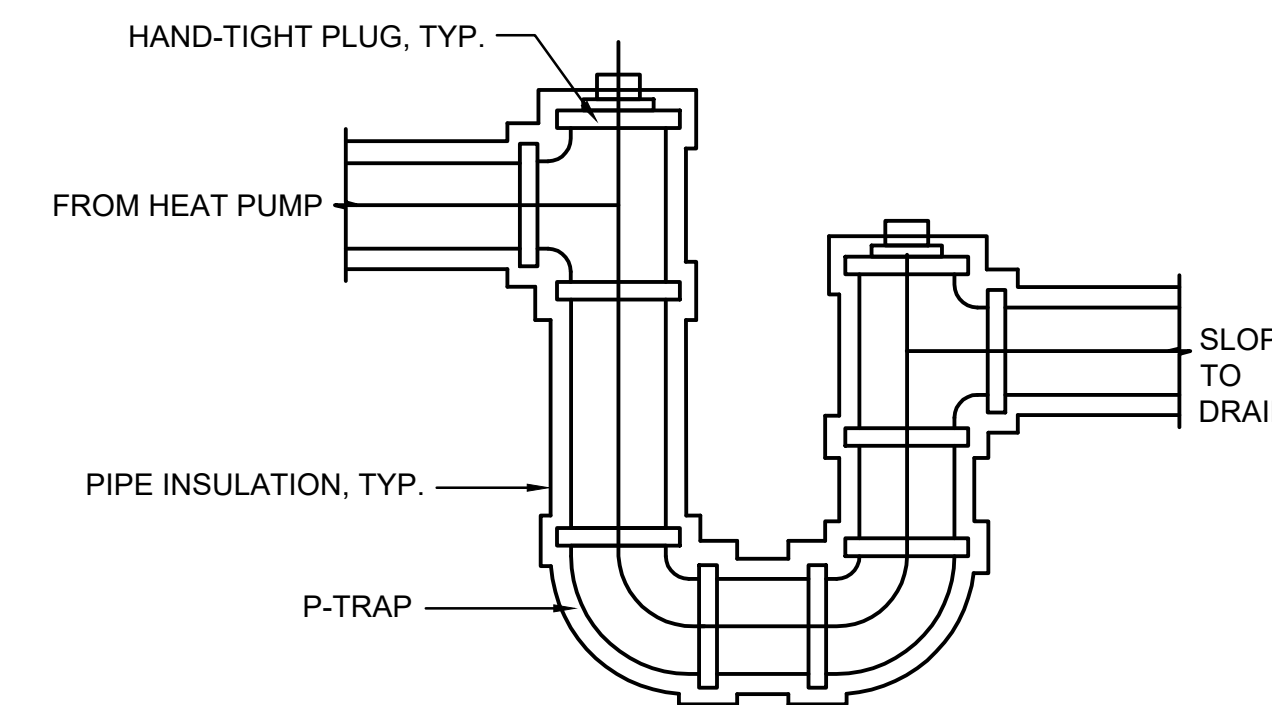
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Drawn	RB
Checked	JY
Date	03-20-2026
Job No.	25-165
Sheet	M-101



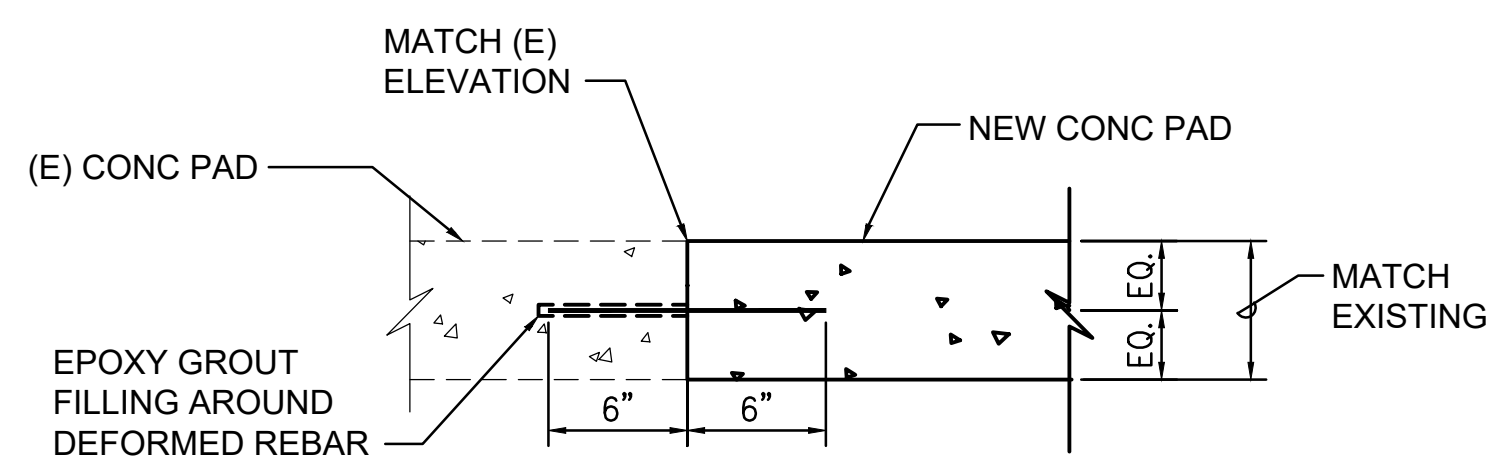
**1 DUCT SUPPORT DETAIL**  
SCALE: NTS



**2 EQUIPMENT SUPPORT DETAIL**  
SCALE: NTS



**3 CONDENSATE TRAP DETAIL**  
SCALE: NTS



NOTE: FOR CONNECTIONS TO CONC. PAD DRILL 1/2"Ø @ 18" O.C. FOR NO. 3 REBAR

**4 EQUIPMENT PAD EXPANSION DETAIL**  
SCALE: NTS

REVISIONS	BY
1	JY
ADD 1	
03/26/2026	

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*Joel P. Yuen*  
EXPIRATION DATE: 03/30/2028

JOEL P. YUEN  
LICENSED PROFESSIONAL ENGINEER  
No. 9805-M  
HAWAII, U.S.A.

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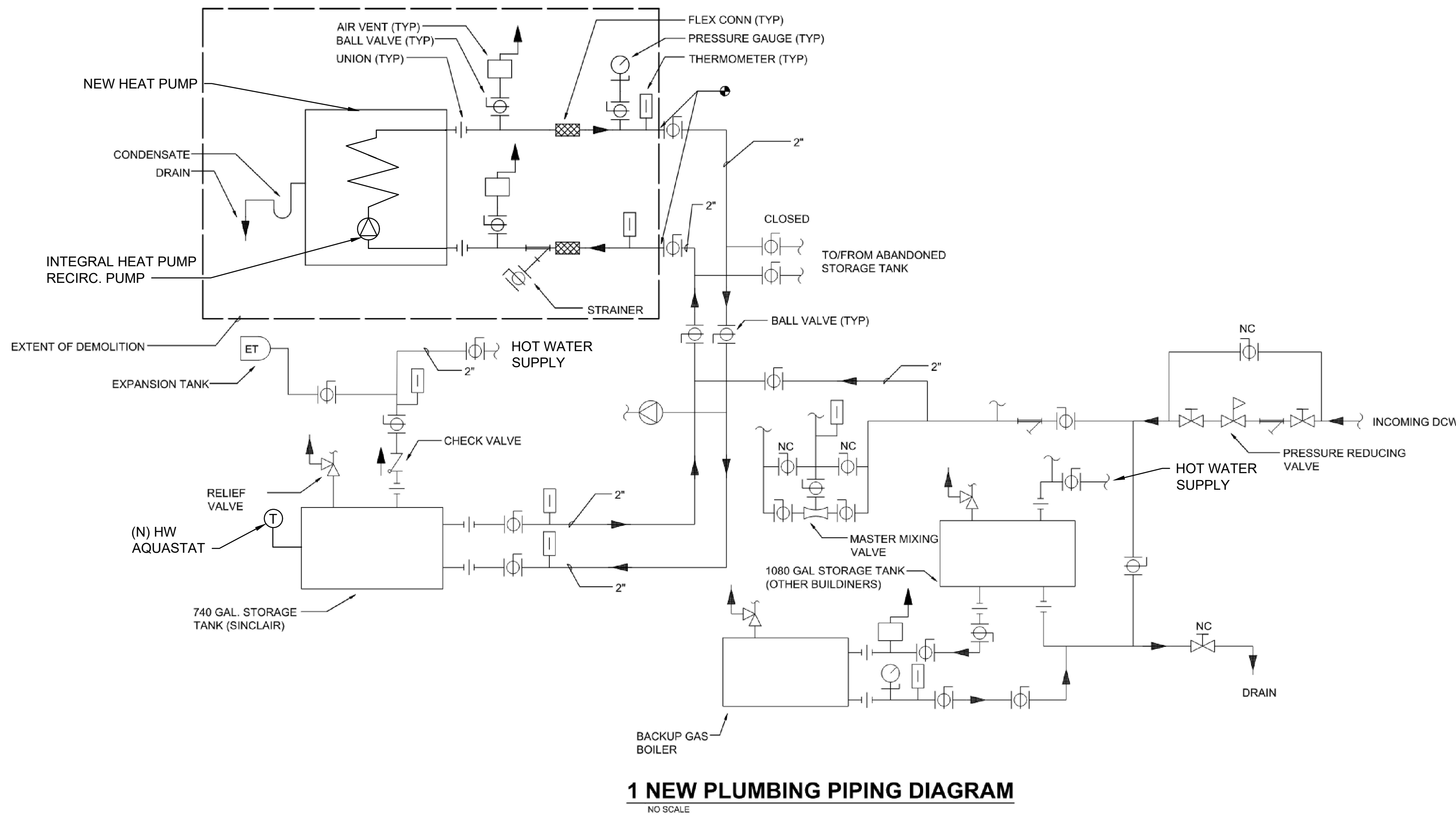
**LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION**  
3675 KILAUEA AVE HONOLULU, HAWAII 96816  
TMK:  
MECHANICAL DETAILS

Designed: KT  
Drawn: RB  
Checked: JY  
Date: 03-20-2026  
Job No.: 25-165

Sheet: **M-501**  
of 10 Sheets

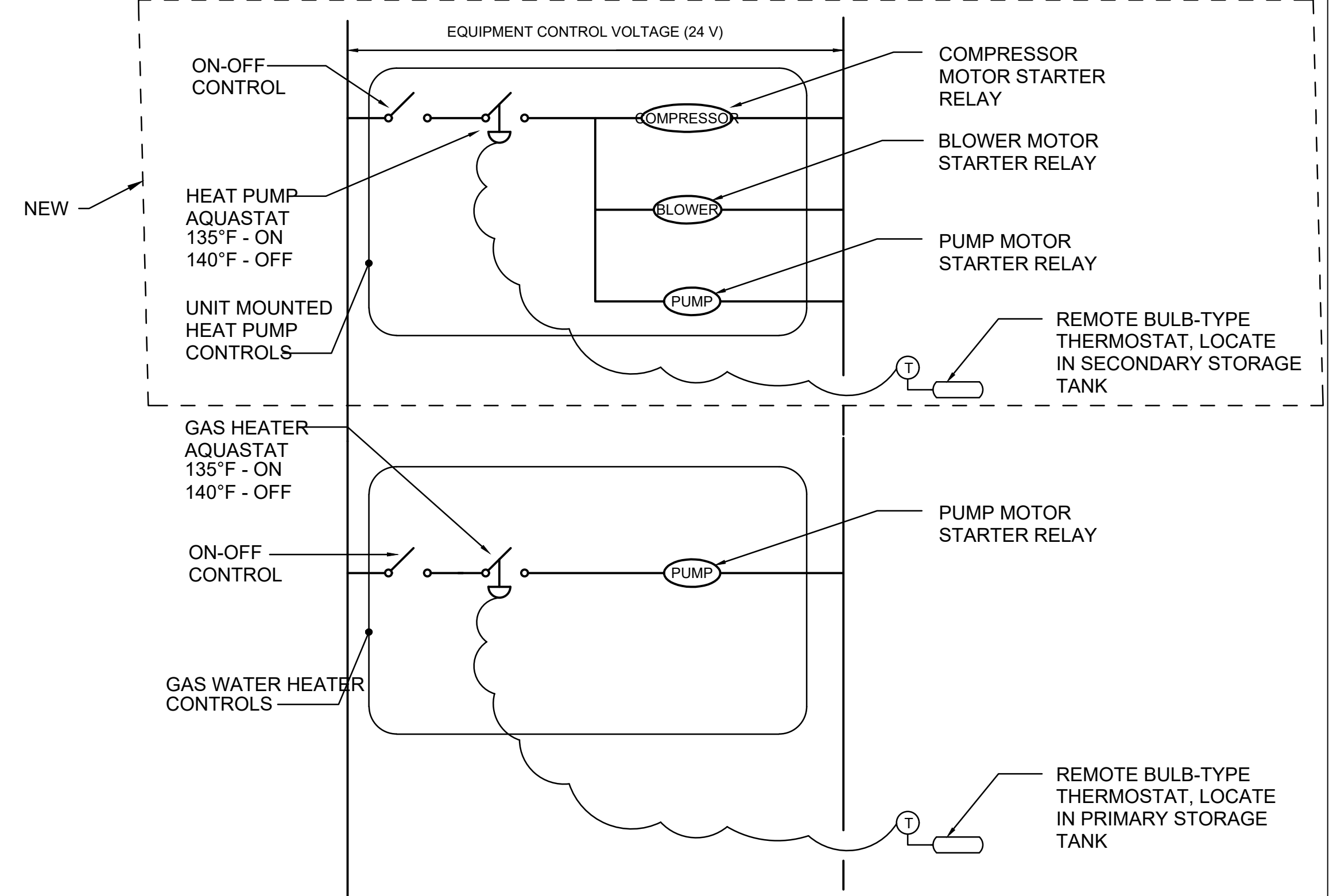
**AIR SOURCE HEAT PUMP SCHEDULE**

UNIT	LOCATION	SERVES	REFRIGERANT TYPE	AMBIENT AIR TEMP. (°F)	HEATING CAPACITY (MBH)	RECOVERY RATE (GPH)	ENTERING WATER TEMP. (°F)	LEAVING WATER TEMP. (°F)	COMPRESSOR TYPE	ELECTRICAL						DIMENSIONS (IN)			AVG A-WEIGHTED SOUND PRESSURE AT 14 FT RADIUS FROM UNIT (dBA)	REMARKS	
										INPUT POWER (KW)	FLA	MCA	MOCP	V	PH	HZ	HEIGHT	WIDTH			LENGTH
HP-1	SINCLAIR BUILDING BASEMENT	SINCLAIR BUILDING	R-513A	75	180.7	301	68	140	HERMETIC SCROLL	21.3	100.2	119.1	85	208	3	60	43.00	73	44	65	PROVIDE WITH SINGLE CENTRIFUGAL SIDE DISCHARGE BLOWER, INTEGRAL WATER PUMP, UNIT MOUNTED CONTROLS INCLUDING HIGH AND LOW PRESSURE SAFETY SWITCHES AND CONTROL PANEL WITH STATUS LIGHTS. PROVIDE COLMAC. PROVIDE SINGLE POINT ELECTRICAL CONNECTION



**1 NEW PLUMBING PIPING DIAGRAM**  
NO SCALE

**1 TYPICAL HOT WATER SYSTEM SCHEMATIC DIAGRAM**  
SCALE: NTS



**SEQUENCE OF OPERATION**

1. THE NEW HEAT PUMP AND GAS WATER HEATER WILL BE ENERGIZED 24 HOURS A DAY.
2. WHEN THE NEW TEMPERATURE SENSOR IN THE PRIMARY TANK REGISTERS A TEMPERATURE BELOW 135 F, THE NEW HEAT PUMP COMPRESSOR, BLOWER AND CIRCULATING PUMP WILL ACTIVATE TO HEAT THE WATER IN THE STORAGE TANKS. WHEN THE TEMPERATURE SENSOR IN THE PRIMARY TANK REGISTERS A TEMPERATURE OF 140 F THE HEAT PUMP COMPRESSOR, BLOWER AND CIRCULATING PUMP WILL DEACTIVATE.
3. WHEN THE EXISTING TEMPERATURE SENSOR IN THE SECONDARY TANK REGISTERS A TEMPERATURE BELOW 135 F, THE EXISTING GAS WATER HEATER WILL ACTIVATE, ENERGIZING THE EXISTING GAS HEATER RECIRCULATION PUMP AND HEATING THE WATER IN THE EXISTING STORAGE TANKS. WHEN THE EXISTING TEMPERATURE SENSOR IN THE SECONDARY TANK REGISTERS A TEMPERATURE OF 140 F, THE EXISTING GAS WATER HEATER WILL DEACTIVATE.

**2 TYPICAL WATER HEATING SYSTEM CONTROL DIAGRAM**  
SCALE: NTS

REVISIONS	BY
1 ADD 1	JY
03/26/2026	

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**Joel P. Yuen**  
EXPIRATION DATE: 03/30/2028  
P. YUEN  
LICENSED PROFESSIONAL ENGINEER  
No. 9805-M  
HAWAII

**INSYNERGY ENGINEERING**  
MECHANICAL • ELECTRICAL • FIRE PROTECTION  
1001 BISHOP ST. SUITE 2500, HONOLULU, HAWAII 96813  
Phone: (808) 521-3773 Fax: (808) 521-3993

**LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION**  
3675 KILAUEA AVE HONOLULU, HAWAII 96816  
TMK:  
MECHANICAL SCHEDULE AND SCHEMATIC

Designed	KT
Drawn	RB
Checked	JY
Date	03-20-2026
Job No.	25-165
Sheet	

**M-601**  
Of 11 Sheets 15

**ELECTRICAL SPECIFICATIONS AND GENERAL NOTES:**

- ALL WORK SHOWN ON THE ELECTRICAL DRAWINGS IS NEW UNLESS OTHERWISE NOTED. ALL MATERIALS SHALL BE NEW AND "LISTED" OR "LABELED" AS DEFINED BY THE NATIONAL ELECTRICAL CODE (NEC). WORK INCLUDES INSTALLATION OF ALL ELECTRICAL SYSTEMS COMPLETE AND OPERATIONAL AS LIMITED BY THE INTENT OF THE CONTRACT DOCUMENTS.
- ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE, AND THE CURRENT BUILDING ORDINANCES OF THE CITY AND COUNTY OF HONOLULU IN FORCE AT THE TIME OF PERMITTING. CONSTRUCTION PRACTICES SHALL CONFORM TO THE LATEST EDITION OF AMERICAN ELECTRICIANS' HANDBOOK BY CROFT AND APPLICABLE INSTRUCTIONS OF MANUFACTURERS OF EQUIPMENT AND MATERIAL SUPPLIED FOR THIS PROJECT.
- RETENTION OF PLANS: ONE SET OF APPROVED PLANS, SPECIFICATIONS, AND COMPUTATIONS SHALL BE RETAINED BY THE BUILDING OFFICIAL FOR A PERIOD OF NOT LESS THAN 90 DAYS FROM DATE OF COMPLETION OF THE WORK COVERED THEREIN, AND ONE SET OF APPROVED PLANS SHALL BE RETURNED TO THE APPLICANT, AND SAID SET SHALL BE KEPT ON THE SITE OF THE BUILDING OR WORK AT ALL TIMES DURING WHICH THE WORK AUTHORIZED THEREBY IS IN PROGRESS.
- STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, AND NFPA 1, AS LOCALLY AMENDED.
- FIRE SAFETY DURING ALTERATION:
  - NFPA 1, 16.4.4.1 WHERE THE BUILDING IS PROTECTED BY FIRE PROTECTION SYSTEMS, SUCH SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING ALTERATION.
  - NFPA 1, 16.4.4.2 WHERE ALTERATION REQUIRES MODIFICATION OF A PORTION OF THE FIRE PROTECTION SYSTEM, THE REMAINDER OF THE SYSTEM SHALL BE KEPT IN SERVICE AND THE FIRE DEPARTMENT SHALL BE NOTIFIED.
  - NFPA 1, 16.4.4.3 WHEN IT IS NECESSARY TO SHUT DOWN THE SYSTEM, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE ALTERNATE MEASURES OF PROTECTION UNTIL THE SYSTEM IS RETURNED TO SERVICE.
  - NFPA 1, 10.7.1.1 AS NECESSARY DURING EMERGENCIES, MAINTENANCE, DRILLS, PRESCRIBED TESTING, ALTERATIONS, OR RENOVATIONS, PORTABLE OR FIXED FIRE-EXTINGUISHING SYSTEMS OR DEVICES OR ANY FIRE-WARNING SYSTEM SHALL BE PERMITTED TO BE MADE INOPERATIVE OR INACCESSIBLE. A FIRE WATCH SHALL BE REQUIRED AS SPECIFIED IN SECTIONS 13.3.3.6.5.2(4)(b), 13.7.1.5.3, 16.5.4, 34.6.3.3, 41.2.2.6, 41.2.2.7, 41.2.4, 41.3.5, 41.4.1, 34.5.4.3, AND 25.1.8 AT NO COST TO THE AHJ. NFPA 1, AS LOCALLY AMENDED.
- THE DRAWINGS DO NOT REFLECT ALL THE EXISTING CONDITIONS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. VISIT THE PROJECT SITE AND BECOME FAMILIAR WITH THE READILY OBSERVABLE EXISTING CONDITIONS, THE EXTENT OF ANY DEMOLITION, RELOCATION, RECONNECTION, AND THE NEW WORK PRIOR TO BIDDING. REPORT ANY READILY OBSERVABLE DISCREPANCIES AND/OR DIFFERENCES BETWEEN THE EXISTING CONDITIONS AND THE CONSTRUCTION DOCUMENTS TO THE ARCHITECT. RESOLVE ALL READILY OBSERVABLE DISCREPANCIES AND QUESTIONS PRIOR TO THE START OF WORK. BID SUBMISSION SHALL BE CONSIDERED AS EVIDENCE THAT THE CONTRACTOR HAS VISITED THE SITE AND RESOLVED ALL READILY OBSERVABLE DISCREPANCIES AND QUESTIONS AND NO EXTRA PAYMENT WILL BE AUTHORIZED FOR WORK REQUIRED BY THE CONTRACTOR'S FAILURE TO DO SO.
- COORDINATE ALL ELECTRICAL WORK WITH THE WORK OF THE OTHER TRADES AND SCHEDULE WORK TO MINIMIZE THE NUMBER AND DURATION OF ELECTRICAL OUTAGES AND IMPACT TO THE OPERATIONS IN OR ADJACENT TO THE PROJECT AREA. COORDINATE ACCESS TO THE PROJECT AREA AND SCHEDULE ALL REQUIRED SYSTEM OUTAGES WITH THE ARCHITECT.
- VERIFY AND COORDINATE ALL PENETRATIONS PRIOR TO THE START OF CONSTRUCTION. OBTAIN APPROVAL BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS OR FIRE RATED WALLS AND CEILINGS.
- SCAN (E.G. X-RAY, ELECTROMAGNETIC, ETC.) ALL CONCRETE WALLS OR FLOOR STRUCTURES PRIOR TO COMMENCING WITH CORING/DRILLING WORK FOR PENETRATIONS TO AVOID DAMAGING THE EXISTING REINFORCING STEEL.
- EXISTING DEVICE AND EQUIPMENT LOCATIONS, CIRCUIT ASSIGNMENTS, WIRING CONNECTIONS, AND CONDUIT RUNS INDICATED WERE DERIVED FROM AVAILABLE REFERENCE DOCUMENTS AND LIMITED FIELD INVESTIGATION. FIELD VERIFY ALL EXISTING CONDITIONS AND MAKE ANY NECESSARY ADJUSTMENTS TO SATISFY THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
- RE-ROUTE ALL EXISTING CONDUIT, WIRING, AND CABLING TO REMAIN WITHIN THE PROJECT AREA AS NECESSARY TO FACILITATE THE REMOVAL OF EXISTING EQUIPMENT AS WELL AS THE INSTALLATION OF ALL NEW EQUIPMENT. REMOVE AND RE-INSTALL ELECTRICAL EQUIPMENT, INCLUDING LIGHTS, TO REMAIN AS REQUIRED.
- WORK INCIDENTAL TO THE CONTRACT AND NECESSARY TO COMPLETE THE PROJECT, ALTHOUGH NOT SPECIFICALLY REFERRED TO IN THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT. AN EXAMPLE OF SUCH INCIDENTAL WORK ARE OUTLET BOXES, JUNCTION BOXES, AND PULL BOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES, LIGHTING FIXTURES, AND EQUIPMENT. ALL INCIDENTAL WORK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE NEC.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL CONDUIT AND WIRING FOR THE POWER CONNECTION TO ALL EQUIPMENT AS INDICATED IN THE DRAWINGS AND SPECIFICATIONS. ALL INCIDENTAL CONDUIT AND WIRING REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM MAY NOT BE SHOWN IN THE DRAWINGS OR SPECIFICATIONS. CONTRACTOR SHALL COORDINATE INCIDENTAL CONDUIT AND WIRING REQUIREMENTS BETWEEN ALL TRADES TO ENSURE THE INCIDENTAL CONDUIT AND WIRING IS PROVIDED AND THE AFFECTED SYSTEMS OPERATE AS INTENDED.
- THE LOCATION OF ALL ELECTRICAL APPARATUS AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND BEFORE INSTALLING, STUDY THE ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DETAILS. THEN MAKE INSTALLATION IN THE MOST LOGICAL MANNER. CIRCUIT ROUTING IS TYPICAL AND MAY BE VARIED IN ANY MANNER. ANY PIECE OF EQUIPMENT/DEVICE MAY BE RELOCATED WITHIN 10' BEFORE INSTALLATION AT THE DIRECTION OF THE ARCHITECT WITHOUT ADDITIONAL CHARGE TO THE PROJECT.
- SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF THE PROJECT'S WORK, THE CONTRACTOR SHALL MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS. IF THESE CHANGES REQUIRE AN ALTERNATE METHOD TO THOSE SPECIFIED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL SUBMIT DRAWINGS TO REFLECT THE PROPOSED ALTERNATE METHODS TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL NOT PROCEED UNTIL APPROVAL IS OBTAINED. REARRANGEMENT OF WORK FOR THE PURPOSE OF COORDINATION SHALL NOT BE CONSIDERED AN ITEM FOR EXTRA COST.
- THE EXISTING ELECTRICAL, TELECOM, FIRE ALARM, AND OTHER ELECTRICALLY-RELATED SYSTEMS IN AREAS ADJACENT TO, OUTSIDE OF, AND/OR OTHERWISE PASSING THROUGH THE PROJECT LIMITS, MUST REMAIN OPERATIONAL DURING THE CONSTRUCTION PERIOD AND POST-CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE DUE CARE AND CAUTION WHEN WORKING NEAR ANY EXISTING EQUIPMENT, DEVICES, OR CABLING/CIRCUITING. PROVIDE NEW JUNCTION BOXES, CONDUITS, WIRING, AND THE LABOR REQUIRED TO FACILITATE THE REQUIRED OPERATIONAL CONTINUITY. BOXES, CONDUITS, AND WIRING SHALL BE IN ACCORDANCE WITH THE NEC. ANY DAMAGE TO THE EXISTING EQUIPMENT, DEVICES, OR CABLING/CIRCUITING RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE IMMEDIATELY REPAIRED OR OTHERWISE RESTORED TO ITS ORIGINAL WORKING CONDITION AT NO ADDITIONAL COST TO THE PROJECT.
- CONCEAL ALL CONDUIT WHEREEVER REASONABLY POSSIBLE; EXPOSED CONDUITS ARE PERMITTED ONLY WHERE SPECIFICALLY SHOWN ON THE DRAWINGS. ALL EXPOSED CONDUITS IN FINISHED AREAS SHALL BE INSTALLED IN THE LEAST VISIBLE LOCATIONS. CARE SHALL BE TAKEN TO INSTALL CONDUIT IN THE MOST AESTHETICALLY PLEASING MANNER.
- WIRING DEVICES AND CONDUITS SHALL BE FLUSH MOUNTED, WHEREVER REASONABLY POSSIBLE. WHERE NEW DEVICES ARE INDICATED TO BE INSTALLED IN EXISTING WALLS, FISH THE CONDUIT DOWN INTO THE EXISTING WALL CAVITY AND KEEP DISTURBANCES TO THE EXISTING WALLS TO A MINIMUM. WHERE OBSTRUCTIONS ARE ENCOUNTERED OR CUTTING OF THE WALL TO ACCOMPLISH THE WIRING DEVICE AND CONDUIT INSTALLATION IS UNAVOIDABLE, CONSULT WITH THE ARCHITECT PRIOR TO COMMENCING ANY WORK.
- PROVIDE TYPEWRITTEN CIRCUIT DIRECTORIES FOR ALL PANELS, NEW OR MODIFIED, REFLECTING THE CIRCUIT ARRANGEMENTS AS THEY WERE ACTUALLY INSTALLED.
- AN ADHESIVE VINYL NAMEPLATE SHALL BE PROVIDED FOR ALL MISCELLANEOUS DEVICES REQUIRING POWER. THE NAMEPLATE SHALL INDICATE THE PANELBOARD SERVING THE DEVICE AND THE CORRESPONDING CIRCUIT ASSIGNMENT. LETTERING SHALL BE A MINIMUM OF 1/4" HIGH. UTILIZE BROTHER "P-TOUCH" LABEL MAKER OR APPROVED SUBSTITUTE.
- A GREEN, EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH THE NEC ARTICLE 250 SHALL BE INSTALLED IN ALL RACEWAYS WHETHER INDICATED ON CONTRACT DRAWINGS OR NOT. INSTALL THIS CONDUCTOR IN ALL RACEWAYS INCLUDING THOSE INSTALLED FOR SWITCH LEGS AND ATTACH TO THE DEVICE, LUMINAIRE, OR EQUIPMENT USING A SUITABLE GROUNDING LUG.
- DO NOT USE A COMMON NEUTRAL FOR MULTIPLE BRANCH CIRCUITS INSTALLED IN A COMMON CONDUIT. PROVIDE A DEDICATED NEUTRAL FOR EACH INDIVIDUAL CIRCUIT. WHERE MULTIPLE DEDICATED NEUTRALS ARE INSTALLED IN A COMMON CONDUIT, PROVIDE COLOR CODING OF THE DIFFERENT NEUTRAL CONDUCTORS IN ACCORDANCE WITH THE NEC (WHITE, GRAY, THREE CONTINUOUS WHITE OR GRAY STRIPES, ETC.)
- PROVIDE NYLON PULLSTRINGS IN ALL EMPTY CONDUITS UNLESS OTHERWISE INDICATED.
- PROVIDE KNOCK-OUT PLUGS FOR ALL UNUSED CONDUIT PENETRATIONS IN BOXES AND ENCLOSURES DUE TO CONDUIT REMOVAL.
- PENETRATIONS THROUGH FIRE-RATED WALLS, CEILINGS, AND FLOORS SHALL BE SEALED TO MAINTAIN FIRE RATINGS. UTILIZE 3M CP25, PUTTY 303, OR OTHER SUITABLE UL-LISTED SEALING SYSTEM.
- PATCH, REFINISH, AND PAINT ALL PENETRATIONS THROUGH WALLS AND SLABS TO MATCH FINISH OF ADJACENT SURFACES.
- RESTORE/REPAIR ANY DAMAGE TO EXISTING SURFACES RESULTING FROM THE INSTALLATION OF NEW ELECTRICAL ITEMS. THE AREAS REPAIRED SHALL MATCH THE ADJACENT SURFACES IN TEXTURE, FINISH, AND COLOR.
- PAINTING OF ELECTRICAL EQUIPMENT:
  - INTERIOR LOCATIONS - PRIME AND PAINT ALL EXPOSED CONDUITS, BOXES, FITTINGS, SUPPORT CHANNELS, MOUNTING HARDWARE, AND ACCESSORIES WITH TWO FINISH COATS TO MATCH THE SURFACE ON WHICH THEY ARE MOUNTED OR TO MATCH THE FINISH OF THE ADJACENT SURFACES. EQUIPMENT SURFACES/COMPONENTS WITH A FACTORY-APPLIED PAINT FINISH NEED NOT BE PAINTED.
- CONDUCTORS SHALL BE COPPER WITH 600 VOLT INSULATION. INSULATION SHALL BE TYPE 90 DEGREES C, WET OR DRY LOCATION, ACCEPTABLE INSULATION TYPES INCLUDE THWN-2, XHHW-2, OR THHN. AN EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH THE NEC SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS WHETHER INDICATED ON PLANS OR NOT.
- TEST ALL ELECTRICAL EQUIPMENT AND SYSTEMS TO DEMONSTRATE COMPLIANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS. GUARANTEE ALL WORK FOR ONE YEAR AFTER FINAL ACCEPTANCE. CORRECT ALL DEFICIENCIES ARISING DURING THIS PERIOD TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST.

ELECTRICAL SYMBOL LIST / MOUNTING HEIGHT SCHEDULE				
MOUNTING HEIGHT FROM FLOOR TO	(SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN)	SYMBOL		DESCRIPTION
		TOP	⌀	
		EXISTING	NEW	
				LUMINAIRE, 1'X4' NOMINAL, CEILING MOUNTED
				LUMINAIRE, LINEAR, WALL MOUNTED
				LUMINAIRE, CEILING
				LUMINAIRE, WALL MOUNTED
	46"			LIGHT SWITCH, WALL MOUNTED, 1P20A, 120/277V, 1HP MAXIMUM
				MOTOR CONNECTION
	60"			FUSED DISCONNECT SWITCH, 3P200A FRAME, VOLTAGE TO MATCH CIRCUITING
	60"			ENCLOSED CIRCUIT BREAKER
				FUSED DISCONNECT SWITCH
				INTERIOR WORK: CONCEALED CONDUIT IN WALLS (NO HASHMARKS INDICATE 2 CURRENT CARRYING CONDUCTORS AND 1 GROUND CONDUCTOR WITHIN, ALL OTHERS SIMILAR).
				EXPOSED RACEWAY
				DENOTES DEMOLITION/REMOVAL
				KEYNOTE INDICATOR

CITY AND COUNTY OF HONOLULU  
REVISED ORDINANCES OF HONOLULU 1990  
CHAPTER 32

TO THE BEST OF MY KNOWLEDGE, THIS PROJECT'S DESIGN SUBSTANTIALLY CONFORMS TO THE BUILDING ENERGY CONSERVATION CODE FOR:

ELECTRICAL COMPONENT SYSTEMS

SIGNATURE: Scott Tomokiyo DATE: 03/20/26  
 NAME: SCOTT TOMOKIYO  
 TITLE: ELECTRICAL ENGINEER  
 LICENSE No.: 15968-E

REVISIONS	BY
1	ADD 1
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This work was prepared by me or under my supervision and construction of this project will be under my observation.  
 Scott Tomokiyo  
 EXPIRATION DATE 04/30/2026

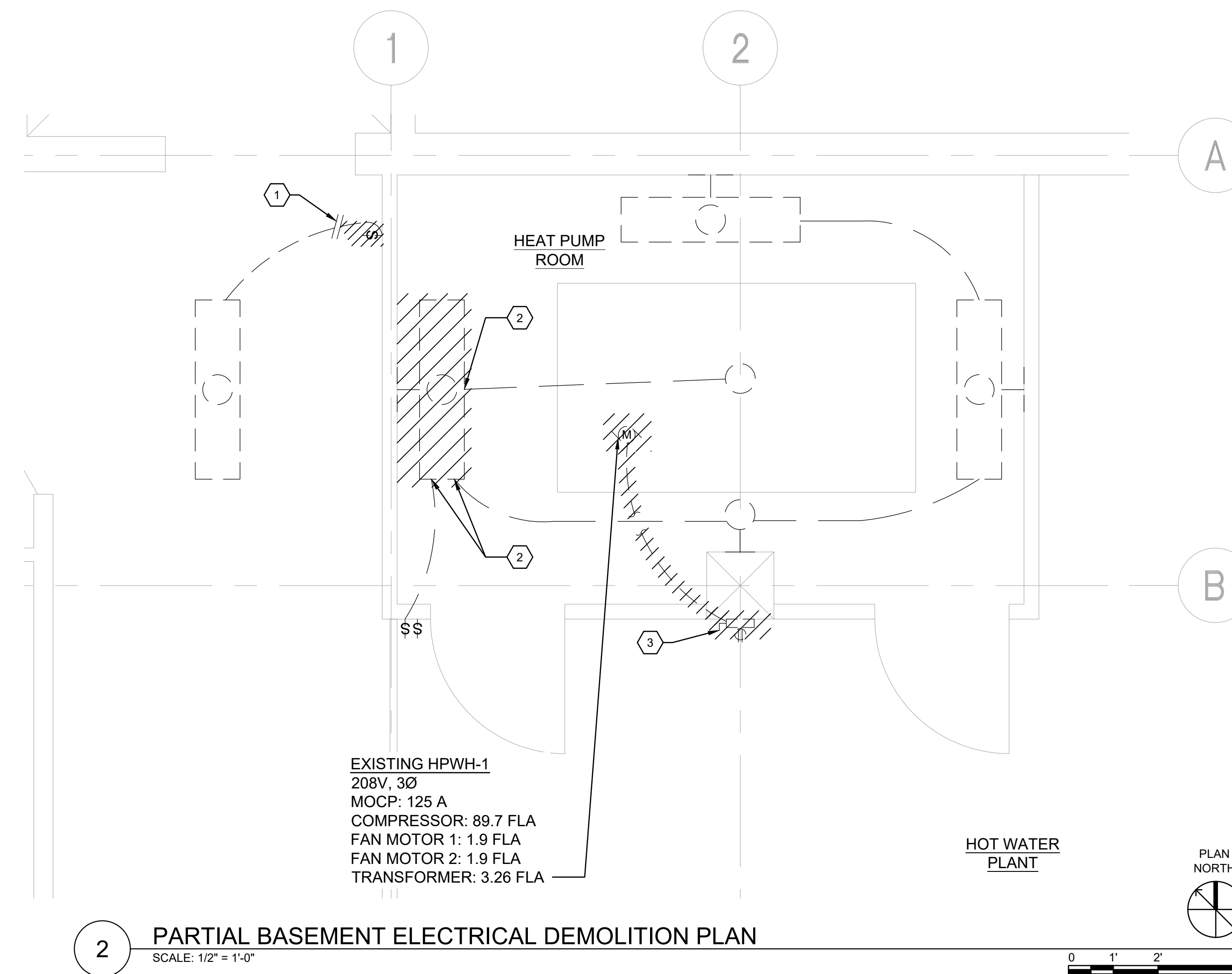
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 1001 BISHOP ST. SUITE 2500, HONOLULU, HAWAII 96813  
 Phone: (808) 521-3773 Fax: (808) 521-3993

**LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION**  
 3675 KILAUEA AVE HONOLULU, HAWAII 96816  
 TMK:

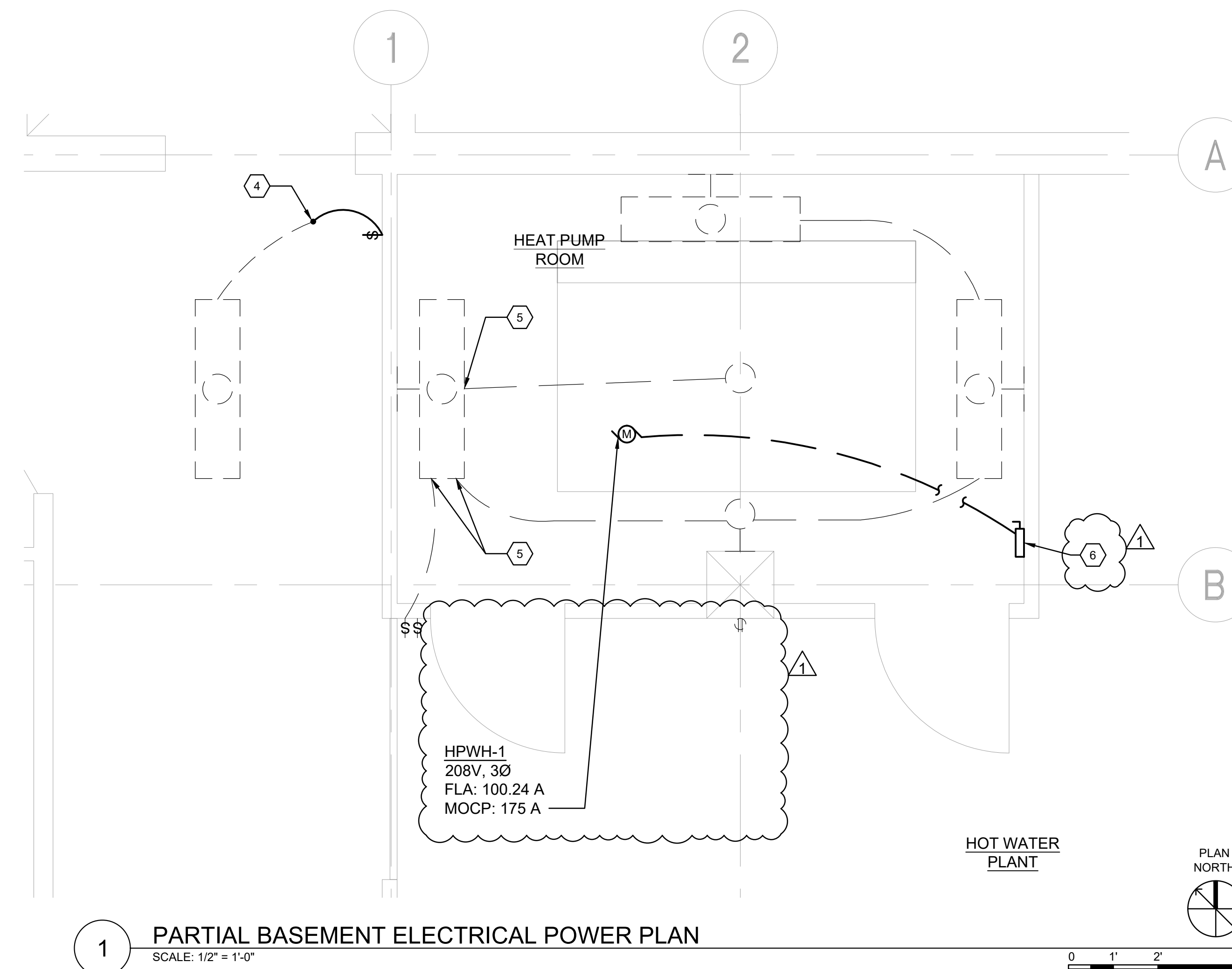
ELECTRICAL SPECIFICATIONS AND GENERAL NOTES

Designed LT  
 Drawn ISE  
 Checked ST  
 Date 03-20-2026  
 Job No. 25-165  
 Sheet E-001  
 Of 12 Sheets 15





**2 PARTIAL BASEMENT ELECTRICAL DEMOLITION PLAN**  
SCALE: 1/2" = 1'-0"



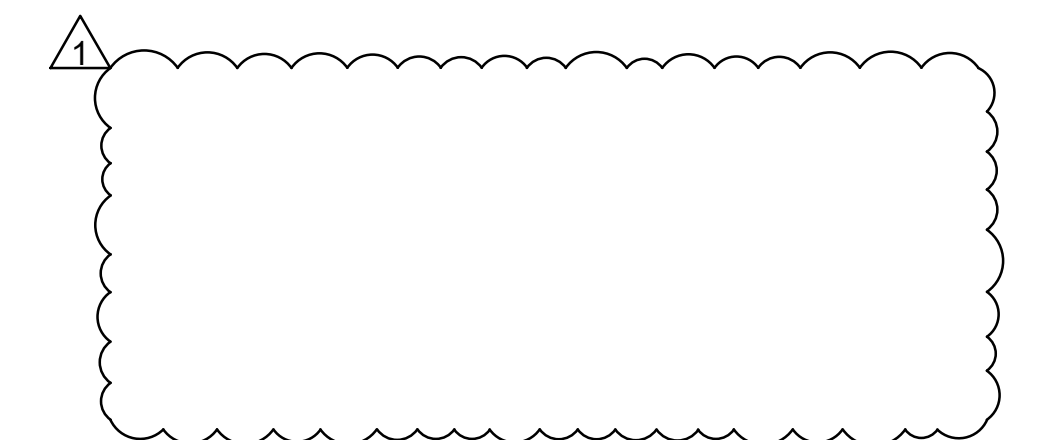
**1 PARTIAL BASEMENT ELECTRICAL POWER PLAN**  
SCALE: 1/2" = 1'-0"

**DEMOLITION PLAN KEY NOTES**

- 1 TRACE AND VERIFY EXISTING POWER SOURCE. REMOVE ELECTRICAL CONNECTION FROM EXISTING LIGHT SWITCH. MAINTAIN EXISTING BRANCH CIRCUITING FOR RE-USE. UPDATE AS-BUILT WITH PANEL NAME AND CIRCUIT NUMBER.
- 2 TRACE AND VERIFY EXISTING POWER SOURCE. REMOVE ELECTRICAL CONNECTION FROM EXISTING LIGHT FIXTURE. MAINTAIN EXISTING BRANCH CIRCUIT AND LIGHT FIXTURE FOR RE-USE. UPDATE AS-BUILT WITH PANEL NAME AND CIRCUIT NUMBER.
- 3 REMOVE ELECTRICAL CONNECTION FROM EXISTING HEAT PUMP. MAINTAIN BRANCH CIRCUIT FOR RE-USE. EXISTING MAINTENANCE RECEPTACLE TO REMAIN.

**POWER PLAN KEY NOTES**

- 4 INTERCEPT EXISTING BRANCH CIRCUITING AND EXTEND TO NEW LIGHT SWITCH AS REQUIRED. PROVIDE NEW EQUIPMENT CONNECTION TO NEW LIGHT SWITCH UTILIZING EXISTING CIRCUIT.
- 5 RECONNECT EXISTING BRANCH CIRCUITING TO EXISTING LIGHT FIXTURE. PROVIDE NEW EQUIPMENT CONNECTION TO LIGHT FIXTURE UTILIZING EXISTING CIRCUIT.
- 6 3P200A DISCONNECT SWITCH, NEMA 1. PROVIDE 2" C, 3 #2/0, #6 GND BETWEEN NEW DISCONNECT SWITCH AND NEW HEAT PUMP.

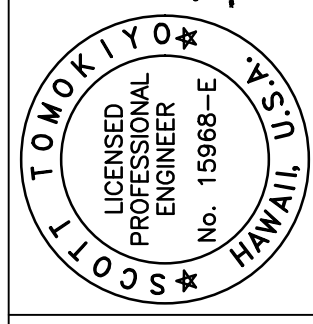


**KEY PLAN**

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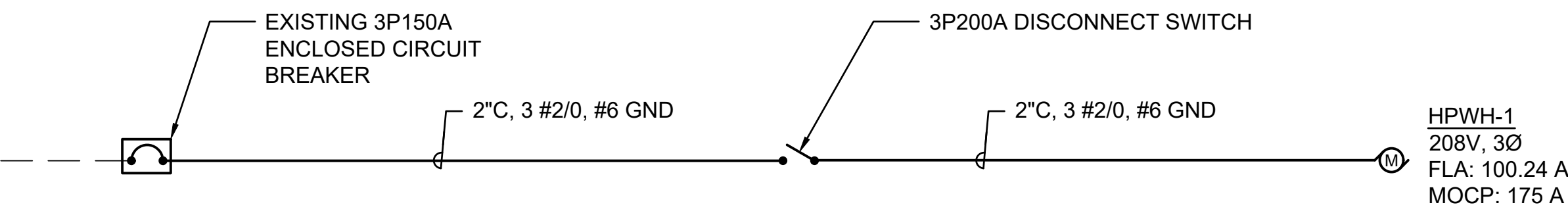
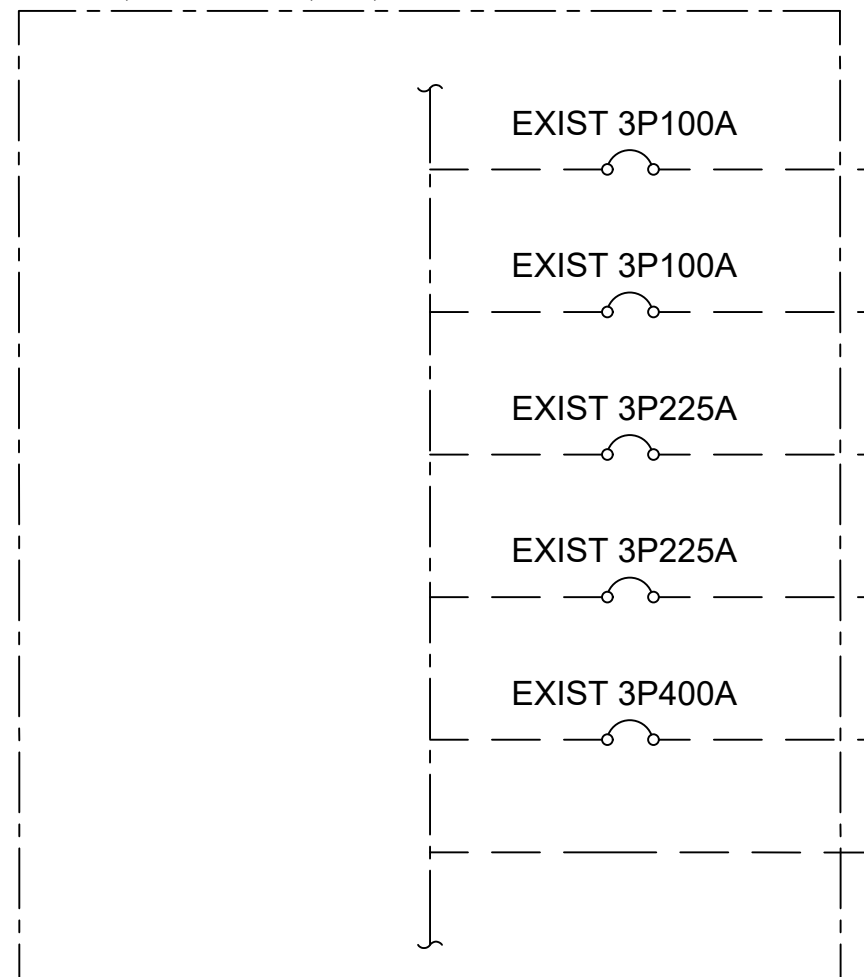
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Phone: (808) 521-3773 Fax: (808) 521-3993

**LEAHI HOSPITAL SINCLAIR BUILDING  
HEAT PUMP SOUND ATTENUATION**  
3675 KILAUEA AVE HONOLULU, HAWAII 96816  
TMK:  
PARTIAL BASEMENT ELECTRICAL PLAN

Designed	LT
Drawn	ISE
Checked	ST
Date	03-20-2026
Job No.	25-165

Sheet  
**E-102**  
Of 14 Sheets 15

EXISTING MAIN DISTRIBUTION PANEL  
GE PANELBOARD  
700A, 208Y/120V, 3Ø, 4W



LEGEND:  
 \_\_\_\_\_ NEW EQUIPMENT, CONDUITS AND CABLES  
 - - - - - EXISTING EQUIPMENT, CONDUIT AND CABLES

HPWH-1  
208V, 3Ø  
FLA: 100.24 A  
MOCP: 175 A

**LOAD CALCULATION:**  
 EXISTING HPWH-1: 34.9 KVA  
 PROPOSED HPWH-1: 36.1 KVA  
 OVERALL LOAD OF HPWH-1 CHANGE:  
 36.1 KVA - 34.9 KVA = 1.2 KVA INCREASE  
 THE CURRENT SYSTEM CAN SUPPORT THE PROPOSED LOAD INCREASE OF 1.2 KVA. THE EXISTING DISTRIBUTION PANEL IS ON A 700A BUS AND THE 3.33A INCREASE SHOULD BE NEGLIGIBLE.

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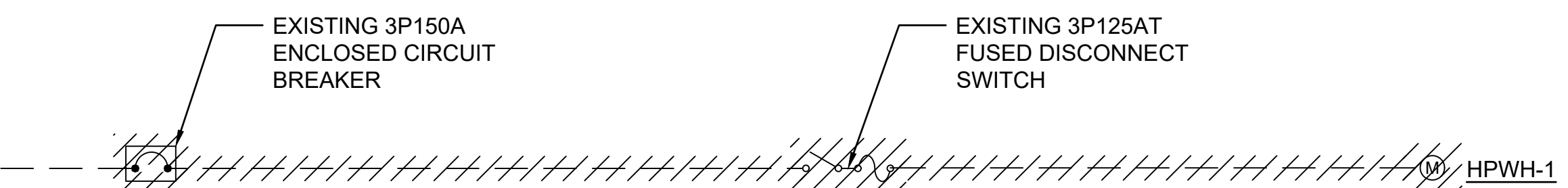
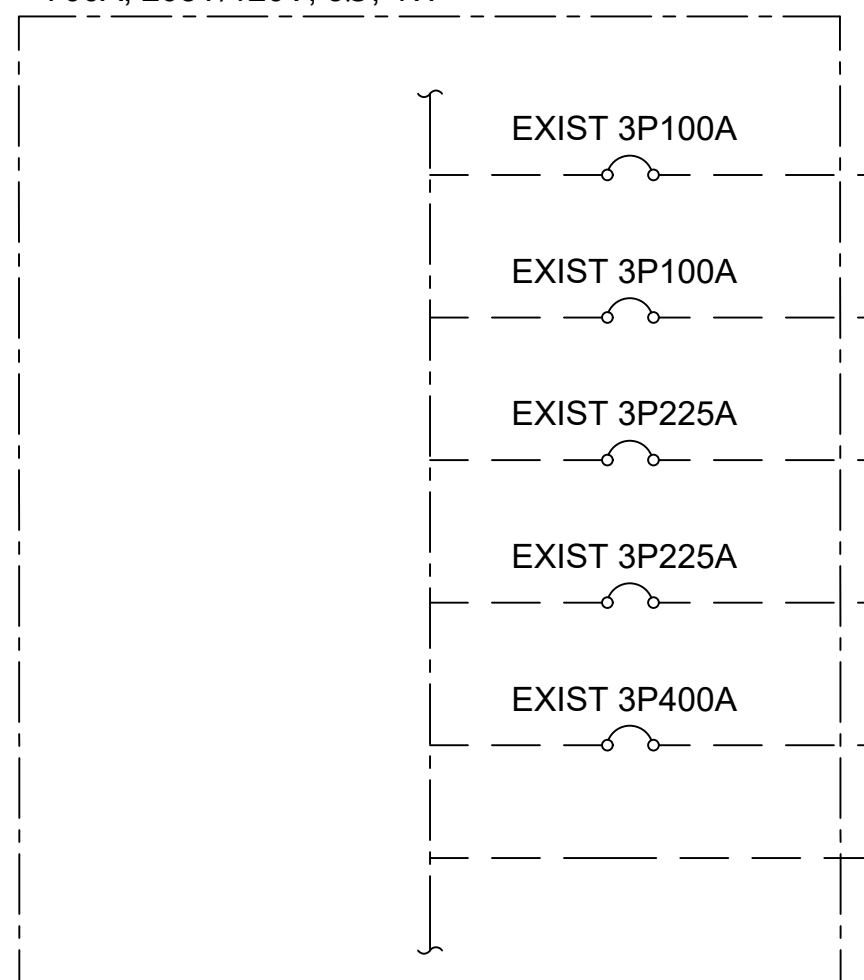
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**Scott Tompkins**  
 LICENSED PROFESSIONAL ENGINEER  
 No. 15988-E  
 HAWAII, U.S.A.  
 EXPIRATION DATE 04/30/2028

**INSYNERGY ENGINEERING**  
 MECHANICAL • ELECTRICAL • FIRE PROTECTION  
 100 BISHOP ST. SUITE 2500, HONOLULU, HAWAII 96813  
 Phone: (808) 521-3773 Fax: (808) 521-3993

2 ELECTRICAL ONE-LINE DIAGRAM  
SCALE: NTS

EXISTING MAIN DISTRIBUTION PANEL  
GE PANELBOARD  
700A, 208Y/120V, 3Ø, 4W



1 ELECTRICAL ONE-LINE DEMOLITION DIAGRAM  
SCALE: NTS

**LEAHI HOSPITAL SINCLAIR BUILDING  
 HEAT PUMP SOUND ATTENUATION**  
 3675 KILAUEA AVE HONOLULU, HAWAII 96816  
 TMK:  
 ELECTRICAL ONE-LINE DIAGRAM

Designed	LT
Drawn	ISE
Checked	ST
Date	03-20-2026
Job No.	25-165
Sheet	E-601