## STATE OF HAWAII DEPARTMENT OF TRANSPORTATION AIRPORTS

#### **ADDENDUM NO.1**

FOR

TERMINAL 2 TSA CHECKPOINT 3 INTERIOR QUEUE INSTALL NEW AC DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAII STATE PROJECT NO. CO1451-43

June 6, 2024

This Addendum shall make the following amendments to the Solicitation:

#### A. SPECIFICATIONS

 Delete SECTION 01010 – DESCRIPTION OF WORK in its entirety and replace it with the attached SECTION 01010 – DESCRIPTION OF WORK dated r6/6/2024.

#### B. PLANS

- 1. Delete the **PLAN SHEET M-100** in its entirety and replace it with the attached **PLAN SHEET M-100 ADD.1** 6/06/24.
- 2. Delete the **PLAN SHEET M-300** in its entirety and replace it with the attached **PLAN SHEET M-300 ADD.1** 6/06/24.
- 3. Delete the **PLAN SHEET M-400** in its entirety and replace it with the attached **PLAN SHEET M-400 ADD.1** 6/06/24.
- 4. Delete the **PLAN SHEET E-001** in its entirety and replace it with the attached **PLAN SHEET E-001 ADD.1** 6/06/24.
- 5. Delete the **PLAN SHEET E-101** in its entirety and replace it with the attached **PLAN SHEET E-101 ADD.1** 6/06/24.

The following is provided for information:

#### C. PRE-BID MEETING MINUTES

The attached pre-bid meeting minutes and attendance sheet are provided for information.

Please acknowledge receipt of this Addendum No.1 by recording the date of its receipt in the space provided on page P-4 of the Proposal.

NATHAN KANESHIGE

**Engineering Program Manager** 

#### **DIVISION 1 - GENERAL REQUIREMENTS**

#### SECTION 01010 - DESCRIPTION OF WORK

#### PART I - GENERAL

#### 1.01 RELATED DOCUMENTS

The General Provisions for Construction Projects (2016), Special Provisions and General Requirements of the Specifications, apply to the work specified this Section.

#### 1.02 SUMMARY

#### A. Section Includes:

- 1. Location of the work
- 2. Hours of work
- 3. Safety
- 4. Operation of airport facilities during construction
- 5. Disposal of excess soil materials
- 6. Construction stakes, lines and grades
- 7. Special project requirements
- 8. Scope of Work

#### 1.03 VEHICLE PARKING

Parking passes may be purchased at a monthly rate of \$175.00 plus a one-time fee of \$25.00 for parking access card. These passes are subject to approval by the Airport Manager and availability of parking spaces. All costs associated with obtaining parking passes shall be the responsibility of the Contractor.

#### 1.04 PROVISIONS FOR FIELD OFFICE/STORAGE SPACE

Pending the availability of space on airport property, the State will issue Revocable Permit(s) to the Contractor for the use of the space, assessed at a monthly fee of \$25 for each Revocable Permit issued. The space(s) may be used for a field office, staging of materials and equipment, vehicle parking or other uses subject to the approval of the State. All spaces shall be subject to the requirements of Section 01561 - CONSTRUCTION SITE POLLUTION CONTROLS.

Since space on airport property is extremely limited, the State does not guarantee that space(s) provided to the Contractor will be in close proximity to the project site. The

State will make every effort to provide the Contractor with space on airport property, however, should the State determine that no space is available for such use(s), the responsibility shall then be on the Contractor to find space outside of airport property.

#### 1.05 LOCATION OF THE WORK

A. The work to be performed under this contract is located at Daniel K. Inouye International Airport in Honolulu, Oahu, Hawaii.

#### B. Conditions:

- 1. The Main Terminal and airport roadways shall remain operational at all times. Any damages to existing areas caused by the Contractor shall be repaired by the Contractor at no cost to the State.
- 2. Upon execution of the contract, the Contractor, at their cost, shall obtain all permits required for this project.

#### 1.06 HOURS OF WORK

- A. Work can be performed at the construction site when the TSA check point is not in operations normally between 11 PM and 4:00 AM and without considerable disruption to airport operations or other adjacent tenants. Submit a proposed construction schedule to Engineer for review and approval within 14 calendar days prior to start of work. The Contractor shall coordinate their schedule with the Engineer if rescheduling of work or intermittent work is required, such work shall be performed at no extra cost to the State. If the Contractor elects to work overtime, compensation for State employees and for construction management consultant as authorized by the State shall be the Contractor's obligation to pay in accordance with Section 7.6 "Overtime and Night Payment for State Inspection Services" of the General Provisions of Construction Projects (2016).
- B. Contractor shall clean work areas at the end of each working shift. Rubbish, loose materials, etc. shall be disposed of daily. **Tools and equipment shall not be left unattended during work hours.** This includes tools left in unlocked vehicles, in the bed of pickup trucks, or in unlocked job sites. TSA citations may result in fines in excess of \$13,000 per violation and the confiscation of AOA badges. Materials shall be safely secured and stored in an area designated by the Airport Manager.

#### 1.07 SAFETY

- A. The Contractor shall take the necessary precautions to protect his workers and other personnel from injuries. The rules and regulations promulgated by the Occupational Safety and Health Acts are applicable and made a part of these specifications.
- B. Barricades and warning signs shall be erected by the Contractor in the work area to properly protect all personnel in the area.

C. During the progress of the work debris, empty crates, waste, material drippings, etc., shall be removed by the Contractor at the end of each workday, and the work area shall be left clean and orderly.

#### 1.08 OPERATION OF AIRPORT FACILITIES DURING CONSTRUCTION

- A. The Contractor shall coordinate the phases of work under this contract with the Engineer to permit the continuing operation of existing Airport facilities and to minimize disruption to pedestrian and vehicular traffic.
- B. Utility Maintenance: During the construction of this contract, existing utility services serving occupied or used facilities shall not be disrupted except where authorized in writing by authorities having jurisdiction. Contractor shall provide temporary services during interruptions to existing utilities, as acceptable to the Engineer. Damages to the existing utility facilities by the Contractor will be repaired at the Contractors expense.
- C. Outages for water, power, communications, air conditioning or any other utility, if necessary, shall be kept to a minimum and scheduled for off-peak hours, generally from 12:00 a.m. to 6:00 a.m. The Contractor shall submit written requests to the Engineer for such outages no later than fourteen (14) calendar days in advance. The request shall include a description of work and the duration of the outage. The Contractor shall not proceed with such outages until written approval is received from the State.

#### 1.09 CONSTRUCTION STAKES, LINES AND GRADES

- A. The Contractor shall perform all construction layout and reference staking necessary for the proper control and satisfactory completion of all structures, grading, paving, drainage, sewer, water, and all other appurtenances required for the completion of the work.
- B. Existing horizontal and vertical survey control points for the project are shown on the plans. The Contractor shall verify the location of all control points prior to the start of construction.
- C. The Department will not be responsible for delays in setting stakes and marks.
- D. All control points and stakes or marks which the Engineer may set shall be preserved by the Contractor. If such control points, stakes or marks are destroyed or disturbed by the Contractor, the cost of replacing such stakes or marks will be charged against the Contractor and deducted from payments due the Contractor.
- E. The Contractor shall be responsible for the placement and preservation of adequate ties to all control points whether established by the Contractor or by the Engineer.

- F. All original, additional or replacement stakes, marks, references and batter-boards which may be required for the construction operations, shall be furnished, set and properly referenced by the Contractor. The Contractor shall be solely and completely responsible for the accuracy of the line and grade of all features of the work. Any errors or apparent discrepancies found in previous surveys, the plans and specifications shall be called to the Engineer's attention by the Contractor for correction or interpretation prior to proceeding with the work.
- G. Before construction is started on any structure which is referenced to an existing structure or topographical feature, the Contractor shall check the pertinent locations and grades of the existing structures or topographical features to determine whether the locations and grades shown on the plans are correct.
- H. All construction staking shall be performed by qualified personnel under the direct supervision of a person with an engineering background who is experienced in the direction of such work and is acceptable to the Engineer.
- I. All stakes and markers used for control staking shall be of the same quality as used by the Department for this purpose. For slope limits, pavement edges, gutter lines, et cetera, where so called "working" stakes are commonly used, stakes of different quality may be acceptable.
- J. The Department may check the Contractor's control of the work at any times as the work progresses. The Contractor will be informed of the results of these checks, but the Department by doing so will in no way relieve the Contractor of his responsibility for the accuracy of the layout work. The Contractor shall at his expense correct or replace any deficient or inaccurate layout and construction work. If, as a result of these deficiencies or inaccuracies, the Department is required to make further studies, redesign, or both, all expenses incurred by the Department due to such deficiencies or inaccuracies, will be deducted from any payments due the Contractor.
- K. The Contractor shall furnish all necessary personnel, engineering equipment and supplies, materials, and transportation incidental to the accurate and satisfactory completion of this work.

Unless otherwise provided, all requirements imposed by this section and performed by the Contractor shall be considered incidental to the various contract items and not separate or additional payment will be made thereof.

#### 1.10 SPECIAL PROJECT REQUIREMENTS

- A. Upon receipt of the Contract, the Contractor shall process and return the Contract to the State' Contract Office within five (5) calendar days.
  - B. The State intends to issue the Notice to Proceed for the Project to the Contractor within 35 calendar days after bid opening. The Contractor shall be able to commence work on this date.

#### 1.11 SCOPE OF WORK

- A. The work involves the following tasks at Daniel K. Inouye International Airport in Honolulu, Oahu.
  - Demo openings in existing cement plaster exterior soffit of Administration Building to accommodate installation of new structural steel supports for new HVAC equipment. Existing cement plaster to be removed and disposed of as asbestoscontaining material.
  - 2. Demo new openings through existing modified bitumen roofing over sloped rigid insulation on metal decking with fireproofing for new HVAC ductwork.
  - 3. Furnish and install new hot-dipped galvanized steel support for new AHU (Air Handler Unit).
  - 4. Construct new curbs for HVAC ductwork penetration through the roof.
  - 5. Patch existing cement plaster exterior soffit of Administration Building, touch-up paint.
  - 6. Painting of new galvanized steel support for new AHU, exposed new electrical conduits and boxes, HVAC ductwork and diffusers.
  - Install new electrical maintenance receptacle on roof. Provide electrical power wiring, conduits, and disconnect and new fire alarm wiring and conduit for new HVAC equipment.
  - 8. Relocate existing light fixture to accommodate installation of new mechanical wok.
- B. The work to be performed under this Contract shall also include preparing and obtaining all permits required to complete this project and other related works as called for on the plans and these specifications.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

#### PART 4 - MEASUREMENT AND PAYMENT

#### 4.01 BASIS OF MEASUREMENT AND PAYMENT

A. Work under this section will not be measured for payment, but will be paid for at the Contract Lum Sum Price.

<u>Item No.</u>	<u>ltem</u>	<u>Unit</u>		
01010.1	Construction Work	Lump Sum		

**END OF SECTION** 

#### CONSTRUCTION NOTES:

- CONTRACTOR SHALL VISIT THE SITE AND BE COMPLETELY FAMILIAR WITH THE EXISTING CONDITIONS AND THE AMOUNT AND KIND OF WORK TO BE PERFORMED. EXISTING CONDITIONS ARE BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY THE LOCATION. INVERT. SIZE AND CONDITION OF EXISTING UTILITIES AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE ENCOUNTERED.
- FOR THE ACTUAL FABRICATION, INSTALLATION, AND TESTING OF WORK UNDER THIS SECTION, THE CONTRACTOR SHALL USE ONLY THOROUGHLY TRAINED AND EXPERIENCED WORKMEN, COMPLETELY FAMILIAR WITH THE ITEMS REQUIRED AND WITH THE MANUFACTURERS' RECOMMENDATIONS AS TO THEIR USE.
- ALL WORK SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE AND ASCE 7 AND STATE AND COUNTY AMENDMENTS, INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2018 AND AMENDMENTS, UNIFORM PLUMBING CODE, INTERNATIONAL MECHANICAL CODE, UNIFORM FIRE CODE, NATIONAL FIRE CODE, NATIONAL FIRE PROTECTION ASSOCIATION REQUIREMENTS, NATIONAL ELECTRIC CODE. TITLE 11 ADMINISTRATIVE RULES. DOH. CHAPTER 39-AIR CONDITIONING AND VENTILATION. AND ALL OTHER APPLICABLE CODES AND STANDARDS.
- 4. ALL WORK SHALL CONFORM TO AND BE IN ACCORDANCE WITH THE WIND LOAD AND SEISMIC DESIGN REQUIREMENTS OF THE 2018 IBC AND ASCE 7. SEISMIC RESTRAINT PRODUCTS SHALL BE PROVIDED AND CERTIFIED BY MASON INDUSTRIES.
- 5. CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, AND OTHER PROTECTIVE DEVICES FOR THE PROTECTION, SAFETY AND CONVENIENCE OF THE PUBLIC.
- 6. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND PAY ALL APPLICABLE FEES PRIOR TO COMMENCING ANY WORK.
- CONTRACTOR SHALL PROVIDE (6) SETS OF SUBMITTALS AND SHOP DRAWINGS FOR ALL MATERIALS AND EQUIPMENT FOR APPROVAL BY THE ENGINEER PRIOR TO COMMENCING ANY WORK. ALL WORK DONE WITHOUT PRIOR APPROVAL SHALL BE SUBJECT TO REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER.
- MATERIALS: MANUFACTURERS SHOWN ON THE CONSTRUCTION DOCUMENTS OR IN THE PROJECT SPECIFICATIONS INDICATE STYLE AND QUALITY. EQUIVALENT FIXTURES MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER.
- OMISSION: SHOULD IT APPEAR THAT ANY PORTION OF THE SYSTEM HAS BEEN OMITTED FROM THE PLANS, THE CONTRACTOR SHALL CALL THE ATTENTION OF THE ENGINEER TO SUCH APPARENT OMISSION ONE WEEK BEFORE THE DATE OF BID OPENING SO THAT CORRECTION MAY BE MADE. OTHERWISE, THE CONTRACTOR SHALL FURNISH AND INSTALL, IN A MANNER CORRESPONDING WITH THE REST OF THE WORK, AS IF THE SAME WERE SPECIFIED AND SPECIFICALLY PROVIDED FOR.

## <u>PLUMBING</u>

- WATER PIPING BELOW AND ABOVE GRADE SHALL BE TYPE "K" COPPER. FITTING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT UPC AND AMENDMENTS. "PLASTI-SLEEVE" OR ACCEPTABLE EQUAL, 10 MIL IN THICKNESS, SHALL BE INSTALLED ON ALL UNDERGROUND PIPING AND PIPING EMBEDDED IN CONCRETE. SOLDER FOR ALL DOMESTIC WATER PIPES SHALL BE "LEAD-FREE" SILVER SOLDER. FLUX SHALL BE NON-CORROSIVE COMPLYING WITH COPPER DEVELOPMENT ASSOCIATION STANDARD 1.0. SOLDER FOR ALL DOMESTIC WATER PIPES SHALL BE "LEAD-FREE" 95-5 OR SILVER SOLDER. CONTRACTOR SHALL PROVIDE DIELECTRIC UNIONS AND COUPLINGS FOR CONNECTIONS OF PIPES AND FITTINGS OF DISSILIMAR METALS. ALL HOT WATER LINES SHALL BE INSULATED IN ACCORDANCE WITH THE IECC 2018.
- SOIL, WASTE, VENT, AND INTERIOR ROOF DRAIN PIPING AND FITTINGS SHALL BE NO-HUB CAST IRON PIPE AND FITTINGS IN ACCORDANCE WITH THE CURRENT UPC AND AMENDMENTS. CONTRACTOR SHALL PROVIDE DIELECTRIC UNIONS AND COUPLINGS FOR CONNECTIONS OF PIPES AND FITTINGS OF DISSIMILAR METALS.

## EXCAVATION AND BACKFILL

- TRENCHES FOR ALL UNDERGROUND PIPE LINES SHALL BE EXCAVATED TO THE REQUIRED DEPTHS. THE BOTTOMS OF THE TRENCHES SHALL BE TAMPED HARD AND GRADED TO SECURE THE REQUIRED FALL. BELL HOLES SHALL BE EXCAVATED SO THAT PIPE WILL REST ON SOLID GROUND FOR ITS ENTIRE LENGTH. ROCK, WHERE ENCOUNTERED, SHALL BE EXCAVATED TO A DEPTH OF 6 INCHES BELOW THE BOTTOM OF THE PIPE AND ROCK SURFACE SHALL BE FILLED WITH SAND.
- AFTER PIPE LINES HAVE BEEN TESTED, INSPECTED, AND APPROVED, PRIOR TO BACKFILLING, FORMS SHALL BE REMOVED AND THE EXCAVATION SHALL BE CLEANED OF TRASH AND DEBRIS. MATERIALS FOR BACKFILLING SHALL CONSIST OF THE EXCAVATION EXCEPT ADOBE, OR BORROW OF SAND, GRAVEL AND OTHER MATERIALS APPROVED BY THE ENGINEER, AND SHALL BE FREE OF TRASH, LUMBER OR OTHER DEBRIS. BACKFILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT EXCEEDING 9" IN THICKNESS, AND PROPERLY MOISTENED TO APPROXIMATE OPTIMUM CONDITIONS. EACH LAYER SHALL BE COMPACTED BY HAND OR MACHINE TAMPERS OR BY OTHER SUITABLE EQUIPMENT TO A DENSITY THAT WILL PREVENT EXCESSIVE SETTLEMENT OR SHRINKAGE. BACKFILL SHALL BE BROUGHT TO SUITABLE ELEVATION ABOVE GRADE TO PROVIDE ANTICIPATED SETTLEMENT AND SHRINKAGE THEREOF. THE BACKFILL SHALL BE TAMPED TO DENSITY EQUAL TO THE SURROUNDING EARTH UNDER CONCRETE FLOOR AND PAVING.

## **PREPARATION**

INVESTIGATE THE CONTRACT DOCUMENTS AND MAKE PROPER PROVISIONS TO AVOID INTERFERENCES OR CONSTRUCTION DELAYS. DETERMINE THE EXACT ROUTE OF EACH PIPE. MAKE OFF-SETS AND CHANGES IN DIRECTION REQUIRED TO MAINTAIN PROPER HEAD ROOM AND PITCH OR TO ACCOMMODATE THE STRUCTURE AND THE WORK OF OTHER TRADES. FURNISH OTHER TRADES WITH INFORMATION TO PROPERLY LOCATE AND SIZE OPENINGS IN THE STRUCTURE REQUIRED FOR THIS WORK. FURNISH ANCHOR BOLTS, SLEEVES, INSERTS, AND SUPPORTS REQUIRED FOR THIS WORK.

## PIPING INSTALLATION AND PIPE SYSTEM SUPPORTS

ALL PIPING INSTALLATION SHALL CONFORM TO THE CURRENT UNIFORM PLUMBING CODE, IBC 2018 (SEISMIC RESTRAINTS), AND ASCE 7 (SEISMIC RESTRAINTS) AS APPLICABLE. ALL PIPING SHALL BE LABELED.

- NO PIPE SHALL BE CLOSED UP, FURRED IN, BUTTED, OR OTHERWISE HIDDEN UNTIL IT HAS BEEN INSPECTED, TESTED, AND APPROVED BY THE PROPER AUTHORITIES.
- UNLESS SPECIFICALLY NOTED OTHERWISE, GRAVITY SANITARY AND DRAINAGE PIPING SHALL SLOPE NOT LESS THAN 1/4 INCH PER FOOT OR HORIZONTAL RUN.

ENDS SHALL BE TAPER REAMED TO FULL I.D. AND ALL BURRS REMOVED.

- ALL PIPING SHALL BE INSPECTED INSIDE AND OUT BEFORE INSTALLATION AND NO OBSTRUCTIONS SHALL BE ALLOWED. PIPE
- UNDERGROUND PIPES PASSING THROUGH WALLS OR AREAS BELOW WALLS OR FOOTINGS SHALL BE PROVIDED WITH PIPE SLEEVES ONE SIZE LARGER AND MADE WATER-TIGHT AT THE SLEEVES. PROVIDE SHEET METAL THIMBLES WHERE PIPES PASS THROUGH FLOORS OR NONSTRUCTURAL MEMBERS, STEEL PIPE SLEEVES WHERE PIPES PASS THROUGH STRUCTURAL MEMBERS AND CONCRETE WALLS.
- ANCHOR PIPING IN BUILDING WITH APPROVED CLAMPS OR ADJUSTABLE HANGERS SPACED IN ACCORDANCE WITH UNIFORM PLUMBING CODE. SEISMIC RESTRAINTS SHALL BE IN ACCORDANCE WITH IBC 2018 AND ASCE 7 AS APPLICABLE.
- ON ROOF DRAINS AND WHERE OTHER DRAINS OCCUR ABOVE THE GROUND FLOOR, PROVIDE CLAMPING DEVICE WITH DRAIN. PROVIDE A FOUR-POUND LEAD FLASHING SHEET EXTENDING EIGHT INCHES OUT AROUND DRAIN BODY AND SECURE WITH CLAMPING DEVICE. ON VENTS THROUGH ROOF, EXTEND VENT FLASHING EIGHT INCHES OUT ALL AROUND BASE OF ROOF, EXTEND COLLAR UP VENT AND TURN IN AT TOP.

- G. SECURE EACH WATER LINE WHERE IT PENETRATES PARTITIONS TO SERVE FIXTURES, SHOWER ARMS, HOSE BIBS, AND SIMILAR ITEMS. WRAP ALL LINES PASSING THROUGH CONCRETE WITH POLYETHYLENE TAPE. INSTALL UNIONS OR FLANGES AT ALL VALVES, EQUIPMENT AND SYSTEM SPECIALTIES. SET HOSE BIBS 18-INCHES ABOVE FINISH GRADE, UNLESS OTHERWISE
- PROVIDE CONCRETE THRUST BLOCKS AT EACH CHANGE IN DIRECTION IN UNDERGROUND WATER-PIPING, DRAINAGE AND SEWAGE FORCE MAIN SYSTEMS.

- (1) DRAINAGE AND SANITARY PIPING SHALL BE TESTED IN ACCORDANCE WITH CURRENT UNIFORM PLUMBING CODE AND ALL OTHER APPLICABLE CODES. WATER PIPING SHALL BE TESTED AT 150 PSI FOR 15-MINUTES WITHOUT LEAKING. CONTRACTOR SHALL FURNISH ALL EQUIPMENT FOR THE TESTS AND PAY FOR ALL COSTS OF REPAIRING ANY DAMAGE RESULTING FROM SUCH TESTS. CONTRACTOR SHALL ADJUST SYSTEMS UNTIL THEY ARE APPROVED. TESTS SHALL BE PERFORMED IN THE PRESENCE OF, AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AND INSPECTOR OF THE OFFICIAL AGENCY
- UPON COMPLETION OF WORK ALL STAINS AND DEFECTS MARRING OR DEFACING WALLS, CEILINGS, FIXTURES, OR FLOORS CAUSED BY THE CONTRACTOR'S WORK SHALL BE CLEANED OR REPLACED WITH NEW MATERIAL. ALL FIXTURES SHALL BE WASHED AND POLISHED EVERYTHING LEFT IN 'BROOM CLEAN' CONDITION READY FOR USE.
- CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS UPON COMPLETION AND ACCEPTANCE OF THE WORK.
- 12. CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE TO REPAIR OR REPLACE AT HIS OWN EXPENSE ANY PARTS THAT MAY DEVELOP ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER FINAL PAYMENT.
- 13. THE CONTRACTOR SHALL PROVIDE A ONE-YEAR MAINTENANCE CONTRACT BASED ON THE REQUIREMENTS INDICATED IN THE MECHANICAL SPECIFICATIONS. THE COST OF THE ONE-YEAR MAINTENANCE CONTRACT SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID.
- 14. ALL CONSTRUCTION SHALL CONFORM TO THE 2018 IBC AND THE LATEST MAUI COUNTY / STATE OF HAWAII AMENDMENTS AND ORDINANCES.
- 15. THE AIR CONDITIONING AND VENTILATION SYSTEMS SHALL COMPLY WITH CHAPTER 3-181, HAWAII ADMINISTRATIVE RULES, STATE ENERGY CONSERVATION CODE-2009, DOH CHAPTER 39, AIR CONDITIONING & VENTILATION REQUIREMENTS.

#### AIR CONDITIONING/VENTILATION:

#### PRODUCTS:

- DUCT WORK: DUCT WORK SIZES SHOWN ON THE DRAWINGS ARE INSIDE NET DIMENSIONS. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASHRAE AND SMACNA. DUCT SUPPORTS SHALL BE IN ACCORDANCE TO SMACNA.
  - THE TOP OF ALL EXTERIOR DUCTWORK SHALL BE INSTALLED WITH A RIDGE OR PEAK TO PROVIDE POSITIVE CROSS-SLOPES TO PREVENT PONDING.

UNLESS OTHERWISE NOTED, ALL INTERIOR AIR CONDITIONING SUPPLY AND RETURN DUCTWORK ARE TO BE INTERNALLY-LINED WITH AP ARMAFLEX DUCT INSULATION OF MIN. R-VALUE IN ACCORDANCE WITH IECC 2018. FLEXIBLE CONNECTIONS SHALL BE NEOPRENE FIBERGLASS TYPE WITH 2-INCH AP ARMAFLEX TYPE INSULATION OVER FLEXIBLE CONNECTIONS, AIR HANDLING UNIT, AND DISCHARGE AND RETURN.

ALL EXTERIOR AIR CONDITIONING SUPPLY AND RETURN DUCTWORK ARE TO BE INTERNALLY-LINED WITH AP ARMAFLEX DUCT INSULATION OF MIN. R-VALUE IN ACCORDANCE WITH IECC 2018. FLEXIBLE CONNECTIONS SHALL BE NEOPRENE FIBERGLASS TYPE WITH 2-INCH AP ARMAFLEX TYPE INSULATION OVER FLEXIBLE CONNECTIONS, AIR HANDLING UNIT, AND DISCHARGE AND RETURN.

REFER TO THE MECHANICAL EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR THE AIR CONDITIONING AND VENTILATION **EQUIPMENT** 

- THE CONTRACTOR SHALL VISIT THE WORK SITE AND BECOME FULLY AWARE OF ALL EXISTING CONDITIONS. INVESTIGATE THE CONTRACTOR DOCUMENTS AND MAKE PROPER PROVISIONS TO AVOID INTERFERENCES OR CONSTRUCTION DELAYS. DETERMINE THE EXACT ROUTE OF EACH DUCT AND PIPE. MAKE OFFSETS AND CHANGES IN SHAPE OR DIRECTION REQUIRED TO MAINTAIN PROPER HEAD ROOM AND PITCH OR TO ACCOMMODATE THE STRUCTURE AND WORK OF OTHER TRADES. WHEN CHANGING THE SHAPE OF DUCTWORK, PROVIDE DUCTS HAVING THE SAME FRICTION LOSS AS THE SIZE OF THE DUCT SHOWN IN THE CONTRACT DOCUMENTS.
- FURNISH OTHER TRADES WITH INFORMATION TO PROPERLY LOCATE AND SIZE OPENINGS IN THE STRUCTURE REQUIRED FOR THE WORK UNDER THIS SECTION. FURNISH ANCHOR BOLTS, SLEEVES INSERTS AND SUPPORTS REQUIRED FOR ALL WORK. PROVIDE ACCESS PANELS FOR CONCEALED ITEMS PROVIDED UNDER THIS SECTION THAT REQUIRE MAINTENANCE. ADJUSTMENT OR INSPECTION.
- EQUIPMENT INSTALLATION: INSTALL EQUIPMENT IN THE SPACE ALLOTTED WITH SUFFICIENT CLEARANCE FOR PROPER OPERATION AND MAINTENANCE. WHERE EQUIPMENT DIFFERS IN ARRANGEMENT OR CONNECTIONS FROM THOSE SHOWN, AT NO ADDITIONAL COST TO THE OWNER, PROVIDE ALL REQUIRED CHANGES IN PIPING, SUPPORTS AND APPURTENANCES. PROVIDE EQUIPMENT ACCESSORIES NECESSARY FOR PROPER OPERATION AND SUPPORT. THE COST FOR ALL NECESSARY ACCESSORIES SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID.
- PIPE INSTALLATION: CONFORM TO RECOGNIZED COMMERCIAL STANDARDS AND THE UNIFORM PLUMBING CODE. PROVIDE PROPER SUPPORT AND ADEQUATE PROVISIONS FOR EXPANSION, CONTRACTION, SLOPE AND ANCHORING. PROVIDE DIELECTRIC UNIONS WHERE COPPER TUBING CONNECTIONS TO STEEL PIPE OR PIPE CONNECTIONS OF DISSIMILAR METALS. WRAP PIPE OR TUBING WITH 1/4-INCH THICK FELT, SECURED WITH TAPE, WHERE IT CONTACTS OTHER MATERIALS. PROVIDE STANDARD WEIGHT GALVANIZED STEEL PIPE SLEEVES WHERE PIPE PASS THROUGH STRUCTURE, SUFFICIENTLY LARGE TO PROVIDE 1/4-INCH CLEARANCE AROUND PIPE. WRAP UNINSULATED PIPE WITH POLYETHYLENE TAPE WHERE IT PASSES THROUGH SLEEVE AND WHERE IT CONTACTS CONCRETE AND MASONRY. CAULK WATERTIGHT AROUND PIPES PASSING THROUGH SLEEVES.
- PIPE SUPPORTS: FACTORY-FABRICATED BY ELCEN, FEE AND MASON, GRINNELL OR UNISTRUT. SEISMIC PIPE BRACING: FACTORY-FABRICATED AND CERTIFIED BY MASON INDUSTRIES, INC. PROVIDE CONCRETE INSERTS, BEAM CLAMPS, CHANNEL FRAMING, HANGER RODS AND ACCESSORIES REQUIRED FOR PROPER PIPE SUPPORT IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE AND ALL OTHER APPLICABLE CODES. ALL PIPE SUPPORTS, HANGERS, BRACINGS, ETC. SHALL BE SEISMICALLY BRACED AND SUPPORTED AS TO ADHERE TO THE REQUIREMENTS OF IBC 2018 AND ASCE 7.
- CONDENSATE DRAIN PIPING SYSTEMS: SLOPE LINES AT 1/4-INCH PER FOOT UNLESS OTHERWISE DIRECTED. PROVIDE A WATER SEAL WITH WATER COLUMN 1-INCH GREATER THAN THE TOTAL STATIC PRESSURE OF THE FAN IN INCHES OF WATER. MINIMUM SIZE OF DRAINS TO BE 1-INCH. PROVIDE PLUG TEES IN LIEU OF ELBOWS AT ABOVE GROUND CONDITIONS. ALL CONDENSATE DRAIN LINES AND FITTINGS SHALL BE PROVIDED WITH A MIN. 3/4" THICK AP ARMAFLEX CLOSED-CELL INSULATION.

- G. DUCT WORK: ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ASHRAE, SMACNA, IBC 2018 AND ASCE 7 (WIND-LOAD AND SEISMIC RESTRAINTS), WHICHEVER THE MOST STRINGENT OF THE CODE REQUIREMENTS. RECTANGULAR AND ROUND DUCTS SHALL BE MADE OF GALVANIZED SHEET METAL IN ACCORDANCE TO SMACNA. DUCT SUPPORTS AND WIND-LOAD AND SEISMIC RESTRAINTS SHALL BE IN ACCORDANCE WITH ASHRAE, SMACNA, IBC 2018 AND ASCE 7 REQUIREMENTS, WHICHEVER THE MOST STRINGENT OF THE CODE REQUIREMENTS.
- H. SPECIAL WIRING: ANY WIRING NOT SHOWN AND REQUIRED FOR THE AIR CONDITIONING AND VENTILATION SYSTEMS TO WORK PROPERLY CONNECT THE EQUIPMENT, INCLUDING CONNECTIONS TO SPECIAL SAFETY CONTROL OR APPARATUS NOT SHOWN, SHALL BE INCLUDED.
- SUBSTITUTIONS: REQUEST FOR SUBSTITUTIONS, COMPLETE WITH CATALOG DATA, SHALL BE FURNISHED TO THE ARCHITECT. ANY SUBSTITUTION APPROVED SHALL BE INCLUDED IN THE SUBMITTALS. DESIGN IS BASED ON EQUIPMENT AS DESCRIBED IN THE DRAWINGS EQUIPMENT SCHEDULE. ANY CHANGES IN FOUNDATIONS, BASES, CONNECTIONS, PIPING, CONTROLS, ELECTRICAL EQUIPMENT, WIRING AND CONNECTIONS AND OPENING, REQUIRED BY ALTERNATE EQUIPMENT SPECIFIED, SUBMITTED AND APPROVED, SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
- EQUIPMENT SUBMITTAL: BEFORE BEGINNING WORK, SUBMIT FOR REVIEW MANUFACTURER-CERTIFIED LITERATURE SHOWING RATINGS AND DIMENSIONS OF EQUIPMENT AND A LIST INDICATING ALL MATERIALS AND ITEMS THAT ARE OF A DIFFERENT MANUFACTURER OR MODEL THAN THOSE SPECIFIED. INCLUDE EQUIPMENT WIRING DIAGRAMS. SUBMITTAL OF EQUIPMENT SHALL BE MADE AT ONE TIME; PIECEMEAL SUBMITTALS WILL NOT BE ACCEPTED.
- CONTRACTOR SHALL PERFORM AND PROVIDE A TEST AND BALANCING REPORT TO THE ARCHITECT AND ENGINEER UPON INSTALLATION OF THE AIR CONDITIONING/VENTILATION/KITCHEN VENTILATION EXHAUST AND MAKE-UP SYSTEMS. TEST AND BALANCE SYSTEM IN ACCORDANCE WITH SMACNA MANUAL FOR BALANCING AND ADJUSTMENT OF AIR DISTRIBUTION SYSTEMS. TESTING COMPANY SHALL BE NEBB AND/OR AABC CERTIFIED.
- OPERATION AND MAINTENANCE MANUAL: THREE (3) COPIES OF AN OPERATING MAINTENANCE MANUAL (O&M MANUAL) SHALL BE PROVIDED AND SHALL INCLUDE:
- 1) SHOP DRAWINGS AND/OR CATALOG INFORMATION AND CUTS.
- 2) MANUFACTURER'S SPECIFICATIONS.
- 3) MANUFACTURERS' PARTS LISTS, WIRING DIAGRAM AND EQUIPMENT DRAWINGS.
- 4) COMPLETE LUBRICATION, MAINTENANCE AND INSTRUCTIONS INCLUDING INITIAL
- START-UP INSTRUCTIONS.
- 5) OTHER TECHNICAL, INSTALLATION AND MAINTENANCE DATA AS APPLICABLE.

OPERATION AND MAINTENANCE MANUAL SHALL BE SUBMITTED FOR THE FOLLOWING EQUIPMENT:

- FAN COIL UNITS AND AIR-COOLED CONDENSING UNITS
- 2) AC ROOFTOP UNITS
- 3) EXHAUST AIR FANS

#### 17. <u>FIRE SPRINKLER:</u>

THE FIRE SPRINKLER LAYOUT IS PRELIMINARY ONLY. SPRINKLER LINES AND HEADS MAY BE ADJUSTED TO AVOID BEAMS, COLUMNS, LIGHT FIXTURES, ETC. CONTRACTOR SHALL PREPARE AND SUBMIT DETAILED WORKING DRAWINGS TO THE FIRE DEPARTMENT AND FIRE SPRINKLER SPECIAL INSPECTOR FOR APPROVAL. THREE (3) COPIES OF THE REVIEWED AND APPROVED DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT.

SYSTEM DESCRIPTION: AUTOMATIC SPRINKLER SYSTEM

COMPLETE NEW WET-PIPE AUTOMATIC FIRE SPRINKLER SYSTEM WITH LOCAL ALARM AND CENTRAL-STATION MONITOR AND ALARM.

NFPA 13 CODES & STANDARDS:

SCHEDULE 40 BLACK STEEL SPRINKLER LINES:

PROVIDE FLOW AND TAMPER SWITCHES ON INDIVIDUAL CONTROL VALVES AT EVERY FLOOR AS PER NFPA 13. INTERLOCK SWITCHES WITH FIRE ALARM CONTROL PANEL. ALL FLOW, TAMPER, AND PRESSURE SWITCHES SHALL BE UL LISTED AND COMPATIBLE WITH THE FIRE ALARM CONTROL PANEL (FACP). CONTRACTOR SHALL PROVIDE A MIN. OF 6 SPARE SPRINKLERS PER SPRINKLER HEAD (INCLUDING WRENCHES, STOPPERS, AND CABINET). ALL WORK SHALL BE COORDINATED WITH THE ELECTRICAL CONTRACTOR.

## INSTALLATION

- A. FIRE SPRINKLER INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 13.
- B. SPARE SPRINKLER HEADS AND CABINET, TO INCLUDE WRENCHES AND STOPPERS, SHALL BE PROVIDED FOR EACH TYPE OF HEAD USED ON THE SYSTEM AS PER NFPA 13.
- 18. FIRE SAFETY DURING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL CONFORM IN ACCORDANCE WITH 2006 UNIFORM FIRE CODE. ARTICLE 87.
- 19. FIRE-PROTECTION SYSTEMS. WHEN THE BUILDING IS PROTECTED BY FIRE-PROTECTION SYSTEMS, SUCH SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING ALTERNATION. WHEN ALTERNATION REQUIRES MODIFICATION OF A PORTION OF A FIRE-PROTECTION SYSTEM, THE REMAINDER OF THE SYSTEM SHALL BE KEPT IN SERVICE. WHEN IT IS NECESSARY TO SHUT DOWN THE ENTIRE SYSTEM, A FIRE WATCH SHALL BE KEPT ON SITE UNTIL THE SYSTEM IS RETURNED TO SERVICE. 2006 UFC, SECTION 8705.2.
- 20. FIRE PROTECTION CONTRACTOR SHALL SUBMIT FIRE SPRINKLER SHOP DRAWINGS TO THE SPECIAL INSPECTOR FOR REVIEW AND APPROVAL AND TO BE LODGES WITH D.P.P. AS PART OF THE PERMIT SET.

## **CONTRACTOR NOTES**

## ALLOWABLE CONSTRUCTION HOURS

Work can be performed at the construction site when the TSA check point is not in operations normally between 11 PM and 4:00 AM and without considerable disruption to airport operations or other adjacent tenants. Submit a proposed construction schedule to Engineer for review and approval within 14 calendar days prior to start of work. The Contractor shall coordinate their schedule with the Engineer if rescheduling of work or intermittent work is required, such work shall be performed at no extra cost to the State. If the Contractor elects to work overtime, compensation for State employees and for construction management consultant as authorized by the State shall be the Contractor's obligation to pay in accordance with Section 7.6 – "Overtime and Night Payment for State Inspection Services" of the General Provisions of Construction Projects (2016).

Terminal 2, TSA Checkpoint 3 (including the Interior Queue), shall be ready for use and operational between the hours of 4:00 AM to 11:00 PM daily.

## **TEMPORARY COOLING**

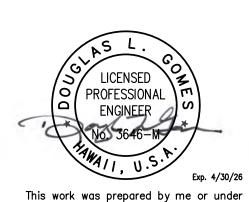
The Contractor, as his expense, shall provide temporary air-conditioning systems (with sufficient cooling capacity to maintain 75-deg. F) for Terminal 2, TSA Checkpoint 3 (including the Interior Queue), between the hours of 4:00 AM to 11:00 PM daily. The temporary cooling systems will be allowed to be removed only when the building's new air conditioning system(s) are operational and have accepted by the State of Hawaii, Dept. of Transportation, Airports Division, Architect, and Engineer of Record.

## MECHANICAL LEGEND

		_					
CW	COLD WATER ————	EXH	EXHAUST	MIN	MINIMUM	WH	WATER HEATER
HW	HOT WATER ————	EXIST	EXISTING	OA	OUTSIDE AIR	WHA	WATER HAMMER ARRESTER
V	VENT — — — —	(E)	EXISTING	OAR	OUTSIDE AIR REGISTER		
AC	AIR CONDITIONING	FCO	FLOOR CLEANOUT	RA	RETURN AIR		
CD	CEILING DIFFUSER	FD	FLOOR DRAIN	RAR	RETURN AIR REGISTER		
CFM	CUBIC FEET PER MINUTE	FS	FLOOR SINK	SA	SUPPLY AIR		
EA	EXHAUST AIR	GV	GATE VALVE	SAR	SUPPLY AIR REGISTER		
EAR	EXHAUST AIR REGISTER	LAV	LAVATORY	VTR	VENT THROUGH ROOF		
EF	EXHAUST FAN	MAX	MAXIMUM	WC	WATER CLOSET		



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION AIRPORTS



my supervision. Construction of this project will be under my observation.

DSGN.	DRWN.	CHKD.	APPD.

$\triangle$ 1	6/06/24	ADDENDUM #1
NO	DATE	REVISION

## CONSTRUCTION **DOCUMENTS**

APRIL 30, 2024

## PROJECT TITLE:

## **TERMINAL 2 TSA CHECKPOINT 3 INTERIOR QUEUE INSTALL NEW AC**

DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU. OAHU. HAWAII

CO1451-43

PROJECT NO.:

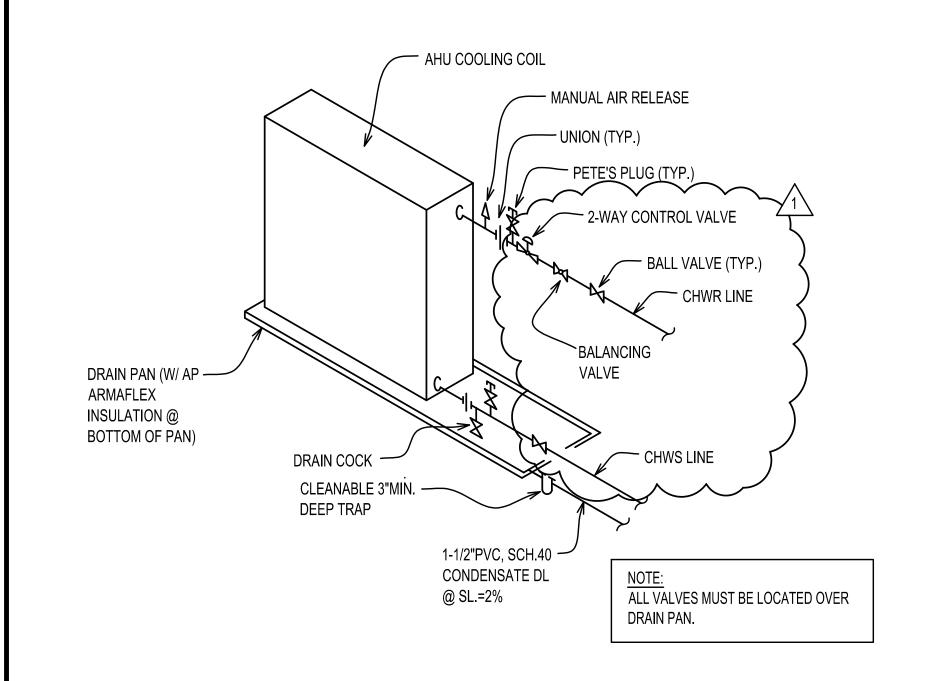
SHEET TITLE:

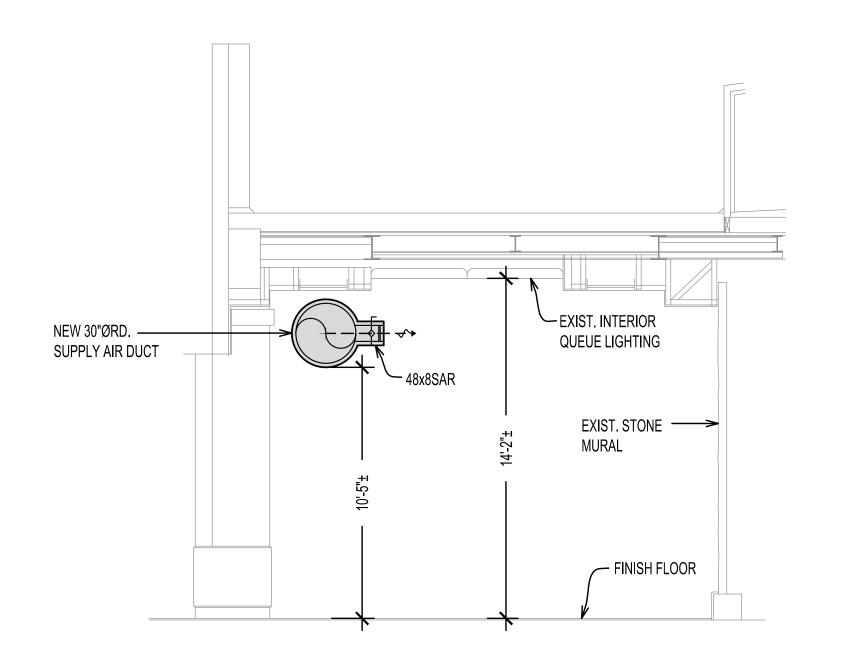
MECHANICAL CONSTRUCTION **NOTES** 

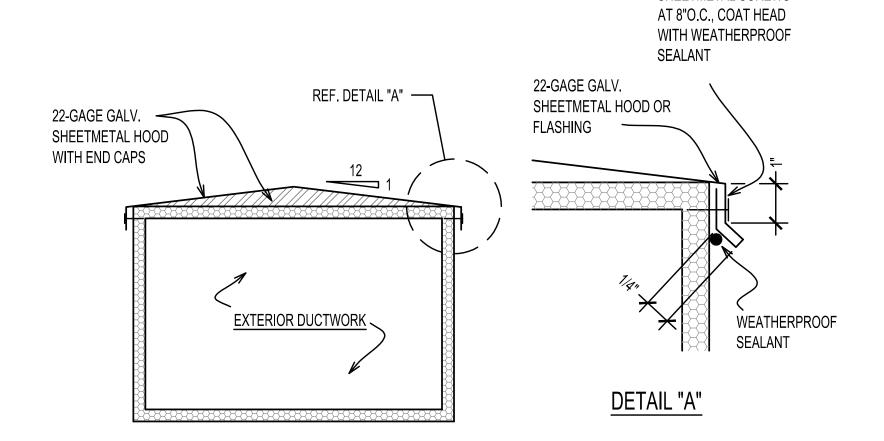
DATE **APRIL 2024** 

SHEET

DWG. NO.







M-300

TYP. DUCT HOOD AND FLASHING DETAIL

SCALE: NONE

SHEETMETAL SCREWS

AHU CHILLED-WATER PIPING DETAIL

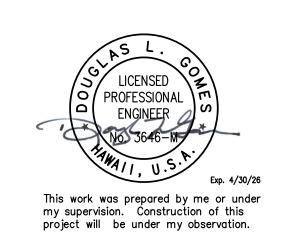
M-300 SCALE: NONE

2 INTERIOR QUEUE DUCTWORK SECTION

M-300 SCALE: NONE



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION AIRPORTS



SGN.	DRWN.	CHKD.	APPD.

1	6/06/24	ADDENDUM #1
NO.	DATE	REVISIONS

# CONSTRUCTION DOCUMENTS

APRIL 30, 2024

PROJECT TITLE:

TERMINAL 2
TSA CHECKPOINT 3
INTERIOR QUEUE
INSTALL NEW AC

AT DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1451-43

SHEET TITLE:

MECHANICAL DETAILS

DWG. NO.
IVI-JUL

## AIR CONDITIONING UNIT EQUIPMENT SCHEDULE

		COOLING	G CAPACITY	/ (RTHH)	EVAPOR	EVAPORATOR AIR		EVAPORATOR AIR		Y BLOWEF	RMOTOR		C	OIL DATA			ELECTRIC	AL DATA	
	MAKE AND MODEL	OOOLIIV	S OAI AOITI	(61011)	VOI	LUME	MOTOR		MOTOR	COIL	FLUID	FLUID	ENT.	LV.		UNIT	UNIT		
UNIT NO.	MAKE AND MODEL	SENSIBLE	TOTAL	TON(S)	CFM	E.S.P. (IN)	] HP	RPM	FLA	ROWS	FLOW RATE (GPM)	PRESS. DROP (FT.WG.)	TEMP. (°F)	TEMP. (°F)	VOLTAGE/PH/HZ	MCA	MFS		
AHU 5	CARRIER MODEL 39MW SIZE 12W	130,280*	186,170*	15	6,000	1.5	7.5	1,516		6 (11-FPI FULL CIRCUIT)	37.1	3.3	45	55	460V/3PH/60HZ				

REMARKS

PROVIDE FCU UNIT CONTROLLER, THERMOSTAT, REMOTE THERMOSTAT SENSOR ON RETURN, CONDENSATE DRAIN PUMP, R-13 DOUBLE WALL SEALED PANEL W/ PAINTED EXTERIOR PANELS, INTERIOR FINISH: GALV. PRE-PAINTED WITH AGION ANTIMICROBIAL, LEVEL II THERMAL BREAK, STAINLESS STEEL SECONDARY DRAIN PAN, MERV 8 FILTERS, AND AHU DDCS CONNECTIONS TO DOT METASYS CONTROL SYSTEM. PROVIDE SEISMIC SPRING ISOLATOR SUPPORTS, ANCHORS, ETC. IN ACCORDANCE WITH IBC 2018 AND ASCE 7. PROVIDE ALL CONTROL WIRING, CONDUIT, UNIT CONTROLLER, THERMOTSTAT, PANELS, VALVES, FITTINGS, ETC. NECESSARY FOR THE COMPLETE OPERATION OF THE NEW FCU AND ALL COMPONENTS (IE SMOKE-DUCT DETECTOR, DDCS ANALOG AND BINARY INPUTS, THERMOSTAT SENSOR, ETC.). PROVIDE PSX700 COATING FOR EXTERIOR PANELS AND CASING.

\*BASED ON ENTERING AIR DRY BULB TEMP.=74.5°F / ENTERING AIR WET BULB TEMP.=64.7°F.

\*\*DDCS NOTE

FCU DDCS SHALL CONNECT TO EXIST. DOT DDCS (METASYS CONTROL SYSTEM). THE FOLLOWING DDCS
FUNCTIONS SHALL BE FULLY FUNCTIONAL AND CONNECTED TO ALL MECHANICAL EQUIPMENT. PROVIDE
SENSORS, THERMOSTATS, TRANSDUCERS, AND OTHER CONTROL DEVICES AS REQUIRED OR AS DIRECTED BY
STATE DOT REPRESENTATIVE AND CONNECT TO DDCS VIA RIC:

- A. ENERGY MANAGEMENT
- B. LOAD MANAGEMENT
- . WEEKLY SCHEDULING . HVAC MANAGEMENT
- SUPPLY AIR RESET
- 2. DDCS COMPONENTS UNDER THIS CONTRACT SHALL BE COMPATIBLE WITH EXIST. DOT DDCS.
- 3. 120V POWER AND CONTROL POWER REQUIRED FOR ALL DDCS EQUIPMENT, CONTROL PANELS, CONTROLLERS, ACTUATORS AND DEVICES, ETC. IS THE DDCS SUBCONTRACTOR'S RESPONSIBILITY. COORDINATE WITH ELECTRICAL SUBCONTRACTORS.
- 4. NOT ALL CONTROL AND MONITOR POINTS ARE SHOWN ON DDCS POINTS SCHEDULE BELOW. INCORPORATE IN DDCS OTHER MONITORING AND CONTROL POINT THAT MAY BE SHOWN ELSEWHERE.

DDCS POINT SCHEDULE:

- . <u>BINARY INPUTS</u>
- (1) STATUS (2) SMOKE DETECTOR
- 3) ALARM
- B. <u>ANALOG INPUTS</u>
- (1) INDIVIDUAL TIME SCHEDULE
- (2) CHWS TEMPERATURE
- (3) CHWR TEMPERATURE
- (4) ROOM TEMPERATURE (5) SA TEMPERATURE
- (6) RA TEMPERATURE (7) CHW VALVE INPUT

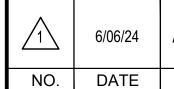


STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

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

DSGN.	DRWN.	CHKD.	APPD.



6/24 ADDENDUM #1

\_\_\_\_

# CONSTRUCTION DOCUMENTS

APRIL 30, 2024

PROJECT TITLE:

TERMINAL 2
TSA CHECKPOINT 3
INTERIOR QUEUE
INSTALL NEW AC

AT DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1451-43

SHEET TITLE:

MECHANICAL EQUIPMENT SCHEDULES

DATE : **APRIL 2024** 

SHEET:

DWG. NO.

M-400

## **GENERAL NOTES**

- 1. CONTRACTOR SHALL PHASE ALL WORK AS PER GENERAL CONTRACTOR.
- 2. CONTRACTOR SHALL REVIEW ARCHITECTURAL, MECHANICAL AND ALL OTHER DISCIPLINE'S DRAWINGS FOR COORDINATION WORK. CONTRACTOR SHALL PROVIDE ADDITIONAL EQUIPMENT AND WIRING AS REQUIRED TO PROVIDE COMPLETE, OPERABLE SYSTEMS.
- CONTRACTOR SHALL FIELD VERIFY EXISTING AND NEW CONDITIONS PRIOR TO START OF ALL WORK AND ADJUST INSTALLATION OF ALL ELECTRICAL EQUIPMENT AND WIRING AS REQUIRED.
- 4. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND REQUIREMENTS OF ALL EQUIPMENT AND OUTLETS WITH AIRPORT, ARCHITECT AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- CONTRACTOR SHALL BREAK AND PATCH CEILINGS, WALLS AND FLOORS AS REQUIRED TO INSTALL ALL CONDUIT, OUTLET BOXES, EQUIPMENT AND LIGHTING.
- CONTRACTOR SHALL PROVIDE ALL STEM MOUNTING AND UNISTRUT SUPPORTS AS REQUIRED TO INSTALL ALL LIGHTING, PANELBOARDS, EQUIPMENT, CONDUIT AND WIRING AS REQUIRED.
- 7. ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS AND CEILINGS SHALL BE FIREPROOF SEALED.
- 8. ALL CONDUITS TO BE CONCEALED AND ALL OUTLET BOXES AND EQUIPMENT BOXES ARE TO BE MOUNTED FLUSH UNLESS OTHERWISE NOTED.
- 9. ALL OUTLETS AND EQUIPMENT SHALL BE LABELED WITH PANELBOARD AND CIRCUIT NUMBER DESIGNATION.
- 10. PENETRATIONS OF ALL EXTERIOR WALLS OR CEILINGS SHALL BE WATERPROOF AND WATERTIGHT.

## **ELECTRICAL SYMBOLS**

EXISTING CEILING LUMINAIRE TO BE REMOVED

ETTT R EXISTING CEILING LUMINAIRE TO BE RELOCATED

RELOCATED CEILING LUMINAIRE

EXISTING PANELBOARD

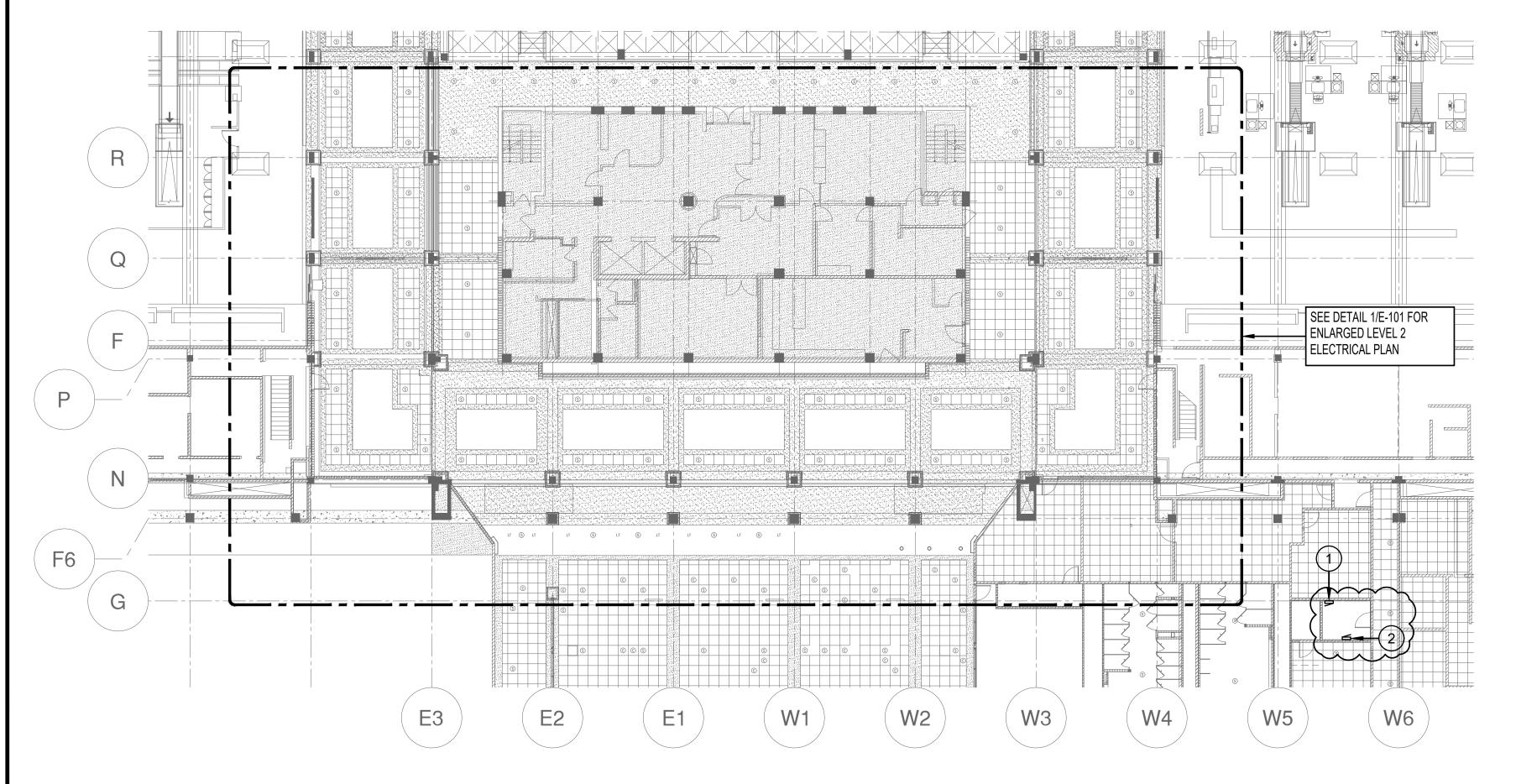
EXISTING DUPLEX CONVENIENCE GFI OUTLET

- DUPLEX CONVENIENCE OUTLET, 3W20A, GROUND FAULT INTERRUPTER TYPE, +18" UNLESS OTHERWISE NOTED
- DUCT SMOKE DETECTOR
- **MOTOR OUTLET**
- MOTOR CONTROLLER
- SAFETY SWITCH
- WEATHERPROOF

———— WIRING IN EXPOSED RACEWAY

WIRING IN RACEWAY CONCEALED IN WALL OR CEILING

- 1. ANY CIRCUIT WITH NO FURTHER DESIGNATION INDICATES A TWO WIRE CIRCUIT. CIRCUITS WITH ADDITIONAL WIRES ARE INDICATED AS FOLLOWS: +/-- , 3 WIRES: -/-/- , 4 WIRES, ETC.
- 2. GROUND WIRE PER NATIONAL ELECTRICAL CODE INDICATED AS FOLLOWS: ——.
- 3. ALL EXPOSED CONDUIT AND BOXES SHALL BE PAINTED TO MATCH ADJACENT WALL OR CEILING SURROUNDING.









**OVERALL LEVEL 2 ELECTRICAL PLAN** 

GRAPHIC SCALE: 1/16" = 1'-0"

#### **KEYED NOTES:**

- (1) EXIST PANEL "WLE1" (SQUARE D NQOD), 208Y/120V, 3Ø, 4W. UTILIZE SPARE 1P20A CIRCUIT BREAKER IN SPACE NO. 19 FOR NEW DUCT SMOKE DETECTOR. REPLACE PANEL CIRCUIT DIRECTORY WITH UPDATED TYPEWRITTEN CIRCUIT DIRECTORY.
- (2) EXIST PANEL "WL5" (SQUARE D NF), 480Y/277V, 3Ø, 4W. REMOVE EXIST BREAKERS AND PROVIDE NEW 1-3P20A CIRCUIT BREAKER IN SPACES 19,21,23 FOR NEW AHU. REPLACE PANEL CIRCUIT DIRECTORY WITH UPDATED TYPEWRITTEN CIRCUIT

EWA EXTENSION

DIAMOND HEAD EXTENSION

- PROJECT LOCATION

CENTRAL CONCOURSE

DIAMOND HEAD CONCOURSE

NO SCALE

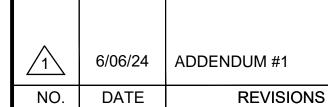
**KEY PLAN** 





This work was propared by the or ander my supervision.							
DSGN.	DRWN.	CHKD.	APPD.				
AC	AC	СР	СР				

**KEY PLAN / NOTES:** 



# **DOCUMENTS**

APRIL 30, 2024 DATE

**TERMINAL 2 TSA CHECKPOINT 3 INTERIOR QUEUE** 

AT DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAII

PROJECT NO.:

SHEET TITLE:

ELECTRICAL SYMBOLS, NOTES, OVERALL LEVEL 2

DATE:

DWG. NO.

**16 OF 17 SHEETS** 

E-001

Licensed Expiration Date This work was prepared by me or under my supervision.

CONSTRUCTION

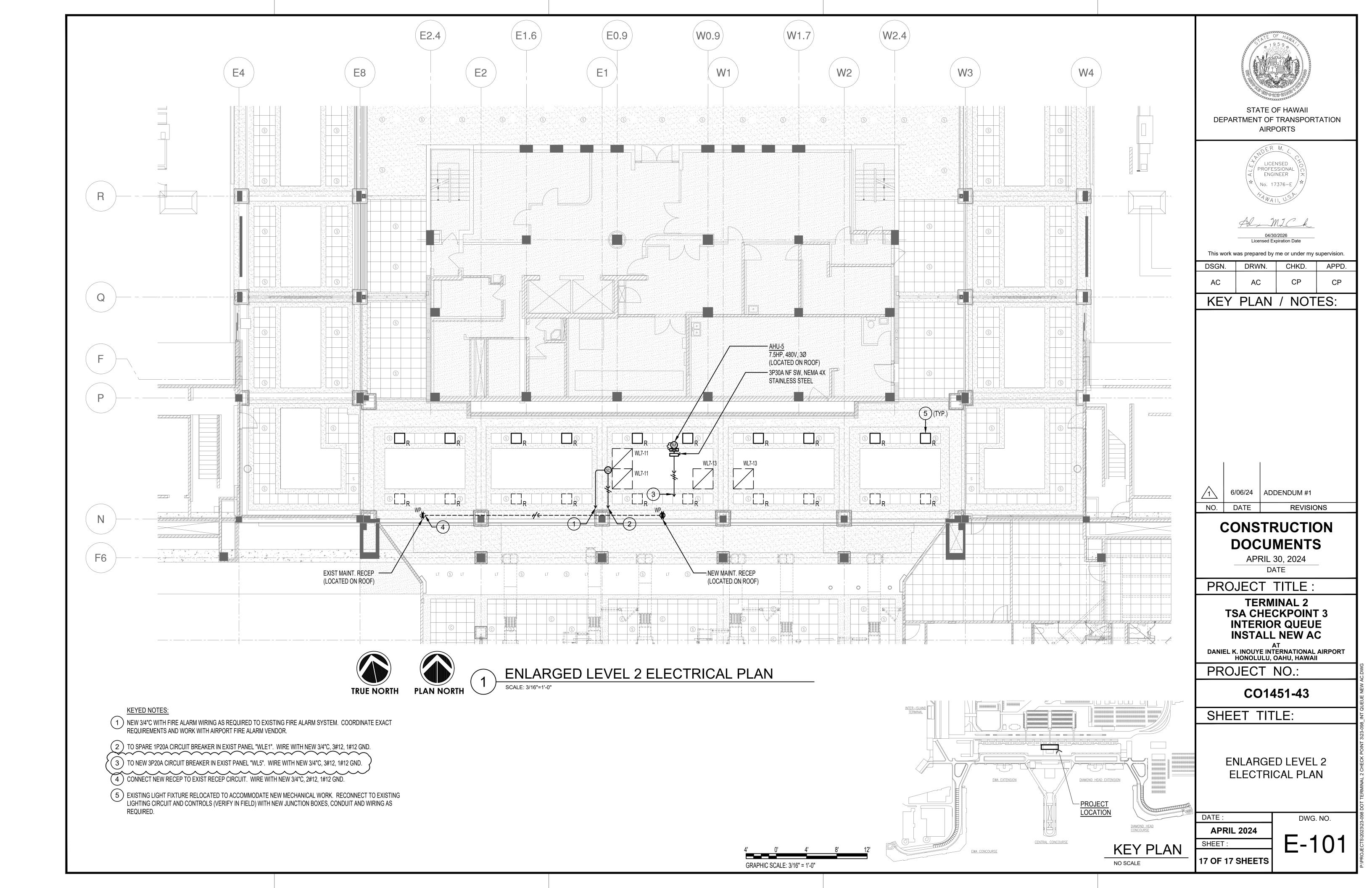
PROJECT TITLE:

**INSTALL NEW AC** 

CO1451-43

ELECTRICAL PLAN

**APRIL 2024** SHEET:



# STATE OF HAWAII DEPARTMENT OF TRANSPORTATION AIRPORTS DIVISION

#### **MEETING MINUTES**

**DATE**: May 23, 2024 **TIME**: 2:00 p.m.

**LOCATION:** Department of Transportation, Airport Division Office,

Conference Room E

PROJECT: Terminal 2 TSA Checkpoint 3 Interior Queue Install New AC

Daniel K. Inouye International Airport

State Project No. CO1451-43

**PRESENT:** See attached list

**SUBJECT:** Pre-Bid Meeting

#### **MEETING SUMMARY:**

#### I. GENERAL DISCUSSION

- 1. Attendees reminded fill out attendance sheet completely (name, address, phone number, etc.) in order to receive copy of meeting minutes.
- 2. Participants involved with the project were introduced (State, Design Consultant, CM Consultant).
- 3. All questions must be submitted in writing to the State Project Manager by May 30, 2024, by 2:00 pm. Questions submitted to HIePRO online.

This meeting is to clarify general questions only. If there is a conflict between what was stated in this meeting and the bid documents, the bid documents shall govern. Any significant changes will be issued through an addendum. A copy of the meeting minutes will be issued to all attendees.

- 4. Design Consultant: Ushijima Architect, Inc. to provide a brief description of the scope of work.
- 5. This is a state project utilizing state special maintenance funds. Prospective bidders are reminded to comply with all state requirements including using the correct wage rates and labor classifications.

TERMINAL 2 TSA CHECKPOINT 3 INTERIOR QUEUE INSTALL NEW AC DANIEL K. INOUYE INTERNATIONAL AIRPORT STATE PROJECT NO. CO1451-43

- 6. Important items brought to attendees attention:
  - Bid Due Date: June 13, 2024 at 2:00 p.m.
  - Last day for Substitution Requests is fourteen (14) calendar days prior to bid opening or May 30, 2024. Submit to HlePRO, online.
- 7. Project duration is 180 calendar days from NTP. Liquidated damages in the amount of \$150.00 per calendar day will be assessed if work is not completed within the contract time.
- 8. Demolition work shall be restricted between the hours of 10:00 pm to 6:30 am. Other requirements are stated on Section 01010.
- 9. Security plan shall be submitted within 14 calendars days after award of contract as specified in Paragraph 1.3 of Section 01565. Other requirements are stated in Section 01565.
- 10. Project work is in a secured area. SIDA badges are required for all workers. Other security requirements are stated in Section 01565, Security Measures.
- 11. Requests for SIDA badges, AOA stickers, ramp licenses, etc. shall be submitted within 14 calendar days after award of contract. In addition to the requirements stated in the Contract Bid Documents, all Contractors shall comply with the requirements and procedures of the Contractor's Training Guide.
- 12. Pending the availability of space on airport property, the State will issue a permit to the Contractor for the use of the space, at a small fee, to be used specifically for a field office and/or storage of materials and equipment. Since space on airport property is extremely limited, the State does not guarantee that the space provided to the Contractor will be in close proximity to the project site. The State will make every effort to provide the Contractor with space on airport property, however, should the State determine that no space is available for such use(s), the responsibility shall then be on the Contractor to find space outside of airport property. Staging areas shall be secured at all times.
- 13. The following is further clarification to what was stated on the agenda:

Parking passes may be purchased at a reduced monthly rate \$175.00 plus a one-time fee of \$25 for parking access card. All costs associated with obtaining parking passes shall be the responsibility of the Contractor.

Pre-Bid Meeting Minutes Page 3 May 23, 2024

> 14. General Provisions for Construction Projects – AIR and Water Transportation Facilities at the bottom of the page link: https://hidot.hawaii.gov/administration/con/

Contractor's Training Guide link:

https://hidot.hawaii.gov/airports/files/2012/12/Contractors-Training-Guide-July-2013.pdf

#### II. QUESTIONS

#### **Questions from Pre-Bid Meeting**

1.

If there are any omissions or corrections to be made to the minutes of the meeting, please respond in writing by May 24, 2024.

Meeting adjourned at: 2:10 p.m.

APPROVED:

Wendy Cheuk 5/23/2024
Wendy Cheuk Date

Project Manager
State DOT Airports Engineering

c: All attendees (See attached sign-in sheet)

#### MEETING ATTENDANCE SHEET Pre-Bid Meeting

Project Name:

TERMINAL 2 TSA CHECKPOINT 3 INTERIOR QUEUE INSTALL NEW AC

Daniel K Inouye International Airport

Project No.

CO1451-43

Meeting Location: Terminal 1, 7<sup>TH</sup> Floor, Conference Room C

Date: 5/23/24

Time: 2:00 pm

Name: Wendy Cheuk	Company: STATE DOTA	Phone: (808) 838-8822
Title: Architect, Project Manager Initial:	Address: 400 Rodgers Blvd., Suite 700, Honolulu, HI 96819	email: wendy.cheuk@hawaii.gov
Name: TODD HATA Title: DESIGN CONSUCIANT Initial:	Company: USHIJIMA ARCHITECTS  Address: 2226 YOUNG ST. SUITE A HONOLULU, HI 96826	Phone: (808)946-9544 email: Toppe USHARCH.COM
Name: KATHY NGVYEN Title: ENGINEER Initial: KN	Company: STATE DOTA  Address: 400 ROPGERS BLVD #700	Phone: (808) 838-8675 email: KATHY. KN. NGVFEN® HAWA
Name: John West Title: Engineer Initial: JW	Company: Address:	Phone: (808) 838-8667 email: John. K. Woost @ Harraii. Gov
Name: Fernand Joshua Guiang Title: Engineer Initial:	Company: Address:	Phone: (408) 438 - 4837 email: fernand joshua. m. guiang @ harai. gov
Name: Jake Shrak. Title: Engreer Initial: JS	Company: Bowers + Kubota  Address: 94-409 Akoki St. #201A, Waipahu, HI 96797	Phone: (908) 543-2791 email: jshiraki@boversandkubota.com
Name: IRENE NOHARA Title: CONSTRUCTION MANAGE Initial:	Company: ESH Address:	Phone: 808 554 0883 email: irene Cesh-inc. com