

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SPECIAL PROVISIONS, SPECIFICATIONS,
PROPOSAL FOR
FIRE ALARM SYSTEM UPGRADE,
ELLISON ONIZUKA KONA
INTERNATIONAL AIRPORT
AT KEAHOLE
KAILUA-KONA, HAWAII

STATE PROJECT NO. AH2076-13
AIP PROJECT NO. 3-15-0008-XXXX

2023

NOTICE TO BIDDERS
(Chapter 103D, HRS)

SEALED BIDS for FIRE ALARM SYSTEM UPGRADE, ELLISON ONIZUKA KONA INTERNATIONAL AIRPORT AT KEAHOLE, KAILUA-KONA, HAWAII, STATE PROJECT NO. AH2076-13, AIP PROJECT NO. 3-15-0008-XXXX, will begin as advertised on June 7, 2023, in HiePRO. Bidders are to register and submit bids through HiePRO only. See the following HiePRO link for important information on registering:

<https://hiepro.ehawaii.gov/welcome.html>.

Deadline to submit bids is July 13, 2023, at 2:00 P.M., Hawaii Standard Time (HST). The complete bid Proposal Schedule shall be uploaded into HiePRO prior to bid opening date and time. All other required confidential and proprietary documents shall be uploaded separately. Failure to upload the bid Proposal Schedule into HiePRO shall be grounds for the rejection of the bid. Bids received after said due date and time shall not be considered.

The General Provisions dated 2016 is applicable to this project and is available at [http://hidot.hawaii.gov/administration /con/](http://hidot.hawaii.gov/administration/con/).

The scope of work consists of consolidating and replacing the existing fire alarm initiation and notification appliance devices for the hold rooms, ticket lobbies, baggage claims, building 344, existing immigrations tent, administrative buildings, checkpoint, new Federal Inspection Service (FIS) Building, Baggage Handling Systems (BHS) Building, and USDA Building at Ellison Onizuka Kona International Airport at Keahole. New work will be connected to the existing fire alarm system provided under the terminal modernization work. A new panel

for the old immigrations' facility will be provided and networked via fiber to existing administrative module 2 panel. Additional annunciator compatible with Johnson Control Inc.'s fire alarm system shall be provided within the Aircraft Rescue and Firefighting (ARFF) station and networked via fiber to module 2 panel. The estimated construction cost is between \$2,000,000 and \$3,000,000.

To be eligible for award, bidders must possess a valid State of Hawaii General Building "B" License or Specialty Contractor's "C-13" or "C-15" License prior to the award of contract.

A pre-bid conference is scheduled for June 16, 2023, at 10:00 A.M., HST on Microsoft Teams. All prospective bidders or their representatives (employees) are encouraged to attend, but attendance is not mandatory. Due to the impacts of COVID-19, the pre-bid meeting will be conducted virtually. Anything said at the conference is for clarification purposes and any changes to the bid documents will be made by addendum and posted in HIePRO.

All bidders that wish to attend must send an email indicating their interest to Mr. Benton Ho, our Airports State Project Manager, at benton.ho@hawaii.gov. They will be added to the Microsoft Teams attendance list and will be sent an invitation email with a Microsoft Teams web-link and teleconference call-in number. This will allow each person to attend the pre-bid via the internet or they may call in. The deadline to sign up for the pre-bid conference is one working day prior to the date of the pre-bid conference.

All requests for information (RFI) and substitution requests shall be received in writing in HIePRO no less than 17 calendar days before bid opening. Questions received after the deadline will not be addressed. Verbal RFIs will not receive a response. Reference Special Provisions

Section 2.7 for additional information regarding substitution requests.

Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with §103D-701, HRS and §3-126, HAR.

Campaign contributions by State and County Contractors. Contractors are hereby notified of the applicability of Section 11-355, HRS, which states that campaign contributions are prohibited from specified State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

The Equal Employment Opportunity Regulations of the Secretary of Labor implementing Executive Order 11246, as amended shall be complied with on this project.

The U.S. Department of Transportation Regulation entitled “Nondiscrimination in Federally-Assisted Programs of the U.S. Department of Transportation,” Title 49, Code of Federal Regulations (CFR), Part 21 is applicable to this project. Bidders are hereby notified that the Department of Transportation will affirmatively ensure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin or sex (as directed by 23 CFR Part 200).

The U.S. Department of Transportation Regulations entitled “Participation by Disadvantaged Business Enterprise (DBE) in Department of Transportation Financial Assistance Programs”, Title 49, Code of Federal Regulations, Part 26 is applicable to this project. Bidders are hereby notified that the Department of Transportation will strictly enforce full compliance with all of the requirements of the DBE program with respect to this project.

Bidders are directed to read and be familiar with the DBE Requirements, which establishes the program requirements pursuant to Title 49 Code of Federal Regulations Part 26 and particularly, the requirements of certification, method of award, and evidence of good faith. All Bidders must e-mail our Airports State Project Manager at benton.ho@hawaii.gov, the DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction, the DBE Confirmation and Commitment Agreement – Trucking Company, and the DBE Confirmation and Commitment Agreement – Subcontractor, Manufacturer, or Supplier by the close of business, 4:30 P.M., HST, five (5) calendar days after bid opening. Failure to provide these documents shall be cause for bid/proposal rejection.

For additional information, contact Mr. Benton Ho, our Airports State Project Manager, by phone at (808) 838-8804 or email at benton.ho@hawaii.gov.

The State reserves the right to reject any or all proposals and to waive any defects in said proposals for the best interest of the public.

Ford Fuchigami

FORD N. FUCHIGAMI
Airports Deputy Director

TABLE OF CONTENTS

Page

TABLE OF CONTENTS

PART 0 – GENERAL REQUIREMENTS

PART 0.A – BIDDING REQUIREMENTS

Notice to Bidders	NTB-1 to NTB-4
Instructions for Contractor’s Licensing	1 to 1

PART 0.B – BIDDING DOCUMENTS TO BE SUBMITTED WITH BID

Proposal.....	P-1 to P-7
Proposal Schedule.....	P-8 to P-9
Supplement to Proposal Schedule.....	P-10 to P-13
Surety Bid Bond.....	P-14
Bidder’s Statement on Previous Contracts Subject to EEO Clauses.....	P-15
Prohibition of Segregated Facilities.....	P-16
Certification Regarding Lobbying.....	P-17
Trade Restriction Certification.....	P-18 to P-19
Certificate of Buy American Compliance for Manufactured Products.....	P-20 to P-21
Certificate of Offeror/Bidder Regarding Tax Delinquency and Felony Convictions.....	P-22
Certificate of Offeror/Bidder Regarding Debarment.....	P-23

PART 0.C – WAGE RATES

Requirements of Chapter 104, HRS Wages and Hours of Employee on Public Works Law	1 to 2
State of Hawai’i Wage Rate Schedule (Not Physically Included in bid Documents)	1
Federal Wage Rates	1 to 19

PART 0.D – SPECIAL PROVISIONS

Special Provisions.....	SP-1 to SP-12
-------------------------	---------------

PART 0.E – REQUIRED FEDERAL AIRPORT IMPROVEMENT PROGRAM (AIP) CONTRACT PROVISIONS

Notice of Requirements for Affirmative Action To Ensure Equal Employment Opportunity.....	1 to 1
Equal Opportunity Clause.....	1 to 1
Standard Federal Equal Employment Opportunity Construction Contract Specifications	1 to 5
Disadvantaged Business Enterprise Requirements	1 to 15
Buy American Preference Statement.....	1 to 1
Appendix X: Buy American Guidance	X-1 to X-4
U.S.C. Title 49, Subtitle VII, Part E, Chapter 501 Buy American Preferences.....	1 to 2

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (10/17/22).....	1 to 70
General Civil Rights Provisions	1 to 1
Civil Rights – Title VI Assurances.....	1 to 3
Contract Work Hours and Safety Standards Act Requirements.....	1 to 1
Davis-Bacon Requirements	1 to 6
Copeland “Anti-Kickback” Act.....	1 to 1
Energy Conservation Requirements	1 to 1
Procurement of Recovered Materials	1 to 1
Rights to Inventions	1 to 1
Veteran’s Preference	1 to 1
Distracted Driving.....	1 to 1
Clean Air and Water Pollution Control.....	1 to 1

PART 0.F - DBE FORMS

Disadvantaged Business Enterprise (DBE) Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction	1 to 3
Disadvantaged Business Enterprise (DBE) Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction Instructions	1 to 1
Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement – Trucking Company	1 to 1
Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement – Trucking Company Instructions	1 to 2
Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement – Subcontractor, Manufacturer, or Supplier.....	1
Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement – Subcontractor, Manufacturer, or Supplier Instructions	1 to 2

PART 0.G – SAMPLE FORMS

Contract.....	K-1 to K-4
Performance Bond (Surety)	1 to 2
Performance Bond.....	PB-1 to PB-2
Labor and Material Payment Bond (Surety).....	1 to 2
Labor and Material Payment Bond	LB-1 to LB-2
Chapter 104, HRS Compliance Certificate	1

PART I - GENERAL PROVISIONS

General Provisions for Construction Projects, 2016 (Not physically included)

PART II – TECHNICAL PROVISIONS

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01000 DESCRIPTION OF WORK 01000-1 to 01000-8
SECTION 01100 SUMMARY 01100-1 to 01100-4
SECTION 01300 SUBMITTALS01300-1 to 01300-10
SECTION 01400 CONTRACTOR QUALITY
CONTROL PROGRAM.....01400-1 to 01400-7
SECTION 01533 BARRICADES01533-1 to 01533-2
SECTION 01560 ENVIRONMENTAL CONTROLS01560-1 to 01560-6
SECTION 01561 CONSTRUCTION SITE RUNOFF CONTROL
PROGRAM.....01561-1 to 01561-21
SECTION 01562 MANAGEMENT OF
CONTAMINATED MEDIAS01562-1 to 01562-17
SECTION 01565 SECURITY MEASURES.....01565-1 to 01565-3
SECTION 01580 TEMPORARY FACILITIES
AND UTILITIES.....01580-1 to 01580-2
SECTION 01581 PROJECT IDENTIFICATION01581-1 to 01581-3
SECTION 01700 MOBILIZATION AND DEMOBILIZATION01700-1 to 01700-2
SECTION 01800 SPECIAL REQUIREMENTS FOR
CONTRACTORS ON THE AOA.....01800-1 to 01800-8
SECTION 02015 EXISTING CONDITIONS: ASBESTOS/LEAD/
HAZARDOUS MATERIAL SURVEY02015-1 to 02015-2
ASBESTOS INSPECTION REPORT KEAHOLE AIRPORT

DIVISION 13 – SPECIAL CONSTRUCTION

SECTION 13851 ADDRESSABLE FIRE ALARM SYSTEM.....13851-1 to 13851-27

DIVISIONS 16 – ELECTRICAL

SECTION 16050 GENERAL ELECTRICAL REQUIREMENTS.....16050-1 to 16050-10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

PART 0 – GENERAL REQUIREMENTS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

PART 0.A – BIDDING REQUIREMENTS

INSTRUCTIONS FOR CONTRACTOR'S LICENSING

"A" general engineering contractors and "B" general building contractors are reminded that due to the Hawaii Supreme Court's January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area where the general contractor has no 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 (*An "A" or "B" contractor obtains "C" specialty contractor's licenses either on its own, or automatically under HAR § 16-77-32.*). The remaining work must be performed by appropriately licensed entities. It is the sole responsibility of the contractor to review the requirements of this project and determine the appropriate licenses that are required to complete the project.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

PART 0.B – BIDDING DOCUMENTS TO BE SUBMITTED WITH BID

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

PROPOSAL

PROPOSAL TO THE
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

PROJECT: Fire Alarm System Upgrade
Ellison Onizuka Kona International
Airport at Keahole
Kailua-Kona, Hawaii

PROJECT NO.: AH2076-13

AIP PROJECT NO.: 3-15-0008-XXXX

COMPLETION TIME: THREE HUNDRED SIXTY FIVE (365) Calendar
days from the date indicated in the Notice to Proceed
from the Department.

DBE PROJECT GOAL: 4.8 %

LIQUIDATED DAMAGES: ONE THOUSAND EIGHT HUNDRED DOLLARS
(\$1,800.00) for each and every working (or calendar)
day which the Contractor has delayed the completion
of this project.

PROJECT MANAGER: Mr. Benton Ho
Department of Transportation
Airport Division
Daniel K Inouye International Airport
400 Rodgers Boulevard, Suite 700
Honolulu, HI 96819-1880
Phone: (808) 838-8804
FAX: (808) 838-8017
Email: benton.ho@hawaii.gov

ELECTRONIC SUBMITTAL: The bidder shall submit the proposal in HlePRO. The
proposal shall be UPLOADED to HlePRO prior to the bid
opening date and time. See SPECIAL PROVISIONS – 2.8
PREPARATION AND DELIVERY OF BID - for additional
information.

Director of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Sir:

The undersigned Bidder declares the following:

1. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
2. It has not been assisted or represented on this matter by any individual who has, in a State capacity, been involved in the subject matter of this contract within the past two years.
3. It has not and will not, either directly or indirectly offered or given a gratuity (i.e.. an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.
4. It will not maintain for its employees any segregated facilities at any of its establishments.
5. Does not and will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained.

The undersigned Bidder further agrees to the following:

1. If this proposal is accepted, it shall execute a contract with the Department to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the time therein prescribed in the contract, and that it shall accept in full payment therefore the sum of the unit and/or lump sum prices as set forth in the attached proposal schedule for the actual quantities of work performed and materials furnished and furnish satisfactory security in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Transportation may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 1032D-323, Hawaii Revised Statutes.
2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.

3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.
4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.
5. Unless amended by Special Provision, agrees to begin work within 10 working days after the date of notification to commence with the work, which date is in the notice to proceed, and shall finish the entire project within the time prescribed.
6. The Director of Transportation reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.

The Bidder acknowledges receipt of and certifies that it has completely examined the following listed items: Hawaii Standard Specifications for Road and Bridge Construction, 2005, and/or the General Provisions for Construction Projects for AIR and WATER Transportation Facilities Division dated 2016, as applicable, the Notice to Bidders, Special Provisions, Proposal, Contract, Bond Forms, and Project Plans.

In accordance with Section 103D-323, Hawaii Revised Statutes, this proposal is accompanied with a bid security in the amount of 5% of the total amount bid, in the form checked below. (Check applicable bid security submitted with bid.)

_____ Surety Bid Bond (Use standard form),

_____ Cash,

_____ Cashier's Check,

_____ Certified Check, or

 (Fill in other acceptable security.)

The undersigned Bidder acknowledges receipt of any addendum issued by the Department by recording in the space below the date of receipt.

Addendum No. 1 _____ Addendum No. 3 _____

Addendum No. 2 _____ Addendum No. 4 _____

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as Bidder, has listed the name of each person or firm who will be engaged by the Bidder on the project as a Subcontractor or Joint Contractor and the nature of work to be done by each on the following page. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Subcontractor or Joint Contractor. For each listed firm, the Bidder declares the respective firm is a Subcontractor or Joint Contractor and is subject to evaluation as a Subcontractor or Joint Contractor. It is understood that failure to comply with the aforementioned requirements may be cause for rejection of the bid submitted.

The undersigned Bidder asserts that affirmative action has been taken to seek out and consider Disadvantaged Business Enterprises (DBEs) for portions of the work which can be subcontracted, and the affirmative actions of the Bidder are fully documented in its records and are available upon request by the Department. It is also understood that it must meet or exceed the DBE contract goal listed on page P-1 or demonstrate that it made good faith efforts to meet the DBE project goal. The undersigned as Bidder agrees to utilize each participating DBE that it submitted to meet the contract goal of _____% (percentage to be completed by Bidder) DBE participation if the contract is awarded to it, and shall maintain such DBE participation during the construction of this project.

SUBCONTRACTOR LISTING
(Attach additional sheets if necessary.)

NAME OF FIRM	NATURE OF WORK
SUBCONTRACTOR:	
1. _____	_____
1a ¹ . _____	_____
2. _____	_____
2a. _____	_____
3. _____	_____
3a. _____	_____
4. _____	_____
4a. _____	_____
5. _____	_____
5a. _____	_____
6. _____	_____
6a. _____	_____
7. _____	_____
7a. _____	_____

NOTES:

The Name of Firm and Nature of Work shall be indicated for all listed firms. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Sub- or Joint Contractor.

For each listed firm, the Bidder declares the respective firm is a Sub- or Joint Contractor and subject to evaluation as a Sub- or Joint Contractor.

¹ Second tier subcontractors

JOINT CONTRACTOR LISTING

(Attach additional sheets if necessary.)

NAME OF FIRM	NATURE OF WORK
JOINT CONTRACTOR:	
1. _____	_____
1a ¹ . _____	_____
2. _____	_____
2a. _____	_____
3. _____	_____
3a. _____	_____
4. _____	_____
4a. _____	_____
5. _____	_____
5a. _____	_____
6. _____	_____
6a. _____	_____
7. _____	_____
7a. _____	_____

NOTES:

The Name of Firm and Nature of Work shall be indicated for all listed firms. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Sub- or Joint Contractor.

For each listed firm, the Bidder declares the respective firm is a Sub- or Joint Contractor and subject to evaluation as a Sub- or Joint Contractor.

¹ Second tier joint contractors

The undersigned hereby certifies that the bid prices contained in the attached proposal schedule have been carefully checked and are submitted as correct and final.

This declaration is made with the understanding that the undersigned is subject to the penalty of perjury under the laws of the United States and is in violation of the Hawaii Penal Code, Section 710-1063, unsworn falsification to authorities, of the Hawaii Revised Statutes, for knowingly rendering a false declaration.

Bidder (Company Name)

Authorized Signature

Title

Business Address

Business Telephone

Email

Date

Contact Person (If different from above.)

Phone: _____ Email: _____

NOTE:

If Bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts for the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign for the corporation.

If Bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above, with the signature(s) of the general partner(s). Please attach to this page current (not more than six months old) evidence of the authority of the partner authorized to sign for the partnership.

If Bidder is an INDIVIDUAL, the bidder's signature shall be placed above.

If signature is by an agent, other than an officer of a corporation or a partner of a partnership, a **POWER OF ATTORNEY** must be on file with the Department before opening bids or submitted with the bid. Otherwise, the Department may reject the bid as irregular and unauthorized.

PROPOSAL SCHEDULE

**FIRE ALARM SYSTEM UPGRADE
ELLISON ONIZUKA KONA INTERNATIONAL AIRPORT
AT KEAHOLE
KAILUA-KONA, HAWAII
STATE PROJECT NO. AH2076-13
AIP PROJECT NO. 3-15-0008-XXXX**

Item No.	Description	Approx. Qty	Unit Price	Total
1. <u>DIVISION 1 - GENERAL REQUIREMENTS</u>				
01000.1	Temporary Traffic Signs & Controls	ALLOW	ALLOW	\$ 30,000.00
01000.2	Unforeseen Conditions	ALLOW	ALLOW	\$ 22,500.00
01000.3	Material Short Supply	ALLOW	ALLOW	\$ 45,000.00
01000.4	Construction Work	LS	LS	\$
01561.1	Construction Site Runoff Control Program	LS	LS	\$
01562.1	Management of Contaminated Medias	ALLOW	ALLOW	\$ 15,000.00
01565.1	Security Measures	ALLOW	ALLOW	\$ 45,000.00
01700.1	Mobilization (Not to exceed 6% of sum of all items, excluding this item, all allowances and force account items)	LS	LS	\$
TOTAL AMOUNT FOR COMPARISON OF BIDS				\$

Notes:

The bid prices herein shall include all labor, materials, equipment, and incidentals necessary to construct all items in place, including installation and testing of equipment, complete and ready for operation, all in accordance with the plans and specifications.

- Note 1: Bid shall include all Federal, State, County and other applicable taxes.
- Note 2: The TOTAL AMOUNT FOR COMPARISON OF BIDS will be used to determine the lowest responsible bidder.
- Note 3: Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.
- Note 4: State reserves the right to reject any or all Bids and to waive any defects in said Bids in the best interest of the State.
- Note 5: Submission of a Bid is a warranty that the bidder has made an examination of the project site and is fully aware of all conditions to be encountered in performing the work and the requirements of the plans and specifications.
- Note 6: The bidder's attention is directed to Section 2.11 – BID SECURITY and Section 2.24 – REQUIREMENTS OF CONTRACT BONDS of the "General Provisions", as amended by the Special Provisions.
- Note 7: Bidders shall be paid for actual work performed as directed by the Engineer for allowance items. Bidder will not be paid overhead and profit for unused allowance funds.
- Note 8: If the TOTAL AMOUNT FOR COMPARISON OF BIDS exceeds the funds available for the project, then the State reserves the right to negotiate with the lowest, responsive, responsible bidder as permitted under Section 103D-302, Hawaii Revised Statutes (HRS), to further reduce the scope of work and award a contract thereafter.
- Note 9: Proposal Sheets P-1 through P-23 shall be submitted at the time of bid. Failure to submit all pages shall result in rejection of bid.
- Note 10: The bidder shall submit the proposal in HiePRO. The proposal shall be UPLOADED to HiePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Original (wet ink) proposal documents are not required to be submitted. The award will be made based on proposals uploaded in HiePRO. Any and all other additional documents explicitly designated and labeled as CONFIDENTIAL OR PROPRIETARY shall be UPLOADED SEPARATELY to HiePRO. If there is a conflict between this specification and its HiePRO solicitation, the specifications shall govern and control unless otherwise specified.

SUPPLEMENT TO PROPOSAL SCHEDULE

The Department recognizes that certain items of material to be incorporated into the project and/or consumed in the prosecution of the project are temporarily in short supply and beyond the control and without the fault of the Contractor. The effect of such shortages has, among other things, resulted in periodic fluctuations in the posted prices of such short supply materials, thereby making the proposal difficult for the Contractor to bid with confidence.

The only materials considered to be in short supply are asphalt cement, portland cement, reinforcing steel, structural steel and galvanized steel.

Each bidder shall submit with the proposal a written statement from the supplier of each short supply material indicating the supplier's current posted price, effective date of that price and the location of the material at that posted price (by island).

If the price of such short supply material is increased or decreased by more than 5% by the supplier prior to the completion of that contract item requiring the short supply material, the Contractor shall submit to the Department a written statement from the supplier indicating the effective date and changed price the Contractor will thereafter be charged for such short supply material. The Contractor shall also obtain whenever possible, quotations for furnishing the material from other available local suppliers. The quotations shall be obtained sufficiently in advance of the need for the material to allow review by the Department so as not to delay the work. The Contractor's request to the Department for adjusted compensation due to such changed prices will be computed only with prices in effect at the time of delivery. Only the lowest quotation obtained will be accepted by the Department. Transportation, handling, loading, processing and other similar costs will not be subject to adjusted compensation.

No adjustment to the unit bid prices will be made when the increase or decrease in the price of the short material is less than 5% of the original posted price.

If the adjustment to the unit bid price is decreased in the price of the short supply material by more than 5% of the original posted price, the State will be credited. The Contractor shall notify the State within five (5) working days in the event of such an occurrence.

When an adjustment in price is made in accordance with this section, the adjustment will be allowed only so long as the purchase price remains more or less than 5% of the original posted price.

If an increase in the price of any short supply material exceeds or is scheduled to exceed 5% of the original posted price, the Contractor must notify the State within five (5) working days before using the short supply material. Upon receipt of such notification

from the Contractor, the State will direct the Contractor to either (1) authorize work to proceed as usual with the assurance that the indicated incremental price increase above the 5% will be compensable, (2) issue such change orders as the State may deem necessary to reduce further requirements of the short supply material which is to be paid at the increase price, or (3) if the material is considered to have priced itself beyond reason or beyond what the State can pay, the State may order cessation of further use of such short supply material on the project. Such notification by the Contractor will be required at each instance of incremental price increase above the 5% limit. If the Contractor fails to notify the State of any such incremental price increase within five (5) working days before using the short supply material and continues to utilize the short supply material on the project, the State will not be responsible for payment for the incremental cost increase of which the State was not forewarned.

Computation for the adjusted compensation will be as follows:

(A) Portland Cement

If, $X =$ Adjustment per cubic yard of concrete,

$P =$ Portland cement content of the approved mix design expressed in hundredweight per cubic yard of concrete,

$Q =$ Increase or decrease in the price of portland cement in dollars per hundredweight,

Then, $X = QP$

Example: Posted price of Portland cement increases from \$1.40 to \$1.70 per cwt. and the hundredweight (cwt) of concrete is 5.6 cwt per c.y., then the adjustment will be:

$$\begin{aligned}
 \$1.70 - \$1.40 &= \$0.30 \\
 (\$1.40) \times (5\%) &= \$0.07 \\
 \$0.30 - \$0.07 &= \$0.23 \\
 X &= (\$0.23) \times (5.6) \\
 &= \$1.29 \text{ per c.y. of concrete}
 \end{aligned}$$

(B) Asphalt Cement

If, $X =$ Adjustment per ton of mix,

$P =$ Asphalt cement content, expressed in percentage of dry weight of the aggregates, as determined and accepted by the Department for each of

the design plant mixes,

Q = Increase or decrease in the price of asphalt cement, in dollars per ton,

Then, $X = Q \times (P) \div (100 + P)$

Example: Posted price of asphalt concrete increases from \$70 to \$80 per ton and the asphalt content of the A.C. mix was accepted at 6.0%, then the adjustment shall be:

$$\begin{aligned} \$80.00 - \$70.00 &= \$10.00 \\ (\$70.00) \times (5\%) &= \$3.50 \\ \$10.00 - \$3.50 &= \$6.50 \\ X &= \$6.50 \times 6 / (100 + 6) \\ &= \$0.37 \text{ per ton A.C. mix} \end{aligned}$$

(C) Reinforcing Steel

If, X = Adjustment for reinforcing steel,

P = Weight of reinforcing steel, expressed in hundredweight,

Q = Increase or decrease in the price of reinforcing steel in dollars per hundredweight,

Then, $X = QP$

Example: Posted price of grade 40 reinforcing steel increases from \$14.00 to \$15.00 per cwt and the weight of the grade 40 reinforcing steel is 80,000 pounds, then the adjustment shall be:

$$\begin{aligned} \$15.00 - \$14.00 &= \$1.00 \\ (\$14.00) \times (5\%) &= \$0.70 \\ \$1.00 - \$0.70 &= \$0.30 \\ X &= (\$0.30) \times (800) \\ &= \$240 \text{ for grade 40 reinforcing steel} \end{aligned}$$

The contractor shall submit to the Department original receipted bills covering the short supply material used on the project as soon as practicable after shipments are completed. The bills shall be accompanied by a tabulation on which the bills are listed in chronological order showing for each bill the quantity, the date shipped from the supplier's terminal and the price per unit at the place indicated in the posted price (reflecting any deductions for quantity shipments). These bills shall be subject to audit

verification.

The Department reserves the right to alter the quantities of material to be furnished in accordance with the provisions of SP Article IV, Paragraph. 4.2.

The Department also reserves the right, during construction, to decrease or increase the scope of work, because of limitations of funds, with no adjustment in unit prices other than that specified hereinabove.

Price increases as specified hereinabove shall not exceed the remaining unpaid balance in the contract at any point in time without prior review and approval from the Engineer or designated representative.

SURETY BID BOND

Bond No. _____

KNOW TO ALL BY THESE PRESENTS:

That we, _____

(full name or legal title of offeror)

as Offeror, hereinafter called the Principal, and

(name of bonding company)

as Surety, hereinafter called Surety, a corporation authorized to transact business as a Surety in the State of Hawaii, are held and firmly bound unto

(State/county entity)

as Owner, hereinafter called Owner, in the penal sum of

(required amount of bid security)

Dollars(\$ _____), lawful money of the United States of America, for the payment of which sum well and truly to be made, the said Principal and the said Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS:

The Principal has submitted an offer for

(project by number and brief description)

NOW, THEREFORE:

The condition of this obligation is such that if the Owner shall reject said offer, or in the alternate, accept the offer of the Principal and the Principal shall enter into a contract with the Owner in accordance with the terms of such offer, and give such bond or bonds as may be specified in the solicitation or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof as specified in the solicitation then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed this _____ day of _____

Name of Principal (Offeror) (Seal)

Signature

Title

Name of Surety (Seal)

Signature

Title

BB-1

rl/17/98

BIDDER'S STATEMENT ON PREVIOUS CONTRACTS
SUBJECT TO EEO CLAUSES

The Bidder shall complete the following statement by checking the appropriate blanks:

The Bidder has _____ has not____ participated in a previous contract subject to the equal opportunity clause prescribed by Executive Order 11246, as amended, of September 24, 1965.

The Bidder has_____ has not____ submitted all compliance reports in connection with any such contract due under the applicable filing requirements; and that representations indicating submission of required compliance reports signed by proposed subcontractors will be obtained prior to award of subcontracts.

If the Bidder has participated in a previous contract subject to the equal opportunity clause and has not submitted compliance reports due under applicable filing requirements, the Bidder shall submit a compliance report on Standard Form 100, "Employee Information Report EEO-I" prior to award of the contract (*).

NOTE: Failure to complete the blanks may be grounds for rejecting the bid.

Signature

(Name of Bidder)

Date

(Name & Title Signing Official)

Business Address

PROHIBITION OF SEGREGATED FACILITIES

- (a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.

- (b) “Segregated facilities,” as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

Date

Signature

Company Name

Title

CERTIFICATION REGARDING LOBBYING

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.
4. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Signed: _____ Dated: _____

Company's Authorized Representative

Typed Name and Title of Authorized Representative

TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

1. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
2. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
3. has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

1. who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or
2. whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or
3. who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

Signature

(Name of Bidder)

Date

(Name & Title Signing Official)

Business Address

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR MANUFACTURED PRODUCTS

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter “X”.

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
- a) Only installing steel and manufactured products produced in the United States;
 - b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
 - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
2. To faithfully comply with providing U.S. domestic product.
3. To furnish U.S. domestic product for any waiver request that the FAA rejects
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

- The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more that 60 percent of the cost of all components and subcomponents of the “item”. The required documentation for a Type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition

Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).

- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “item” component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

**CERTIFICATION OF OFFEROR/BIDDER REGARDING TAX DELINQUENCY AND
FELONY CONVICTIONS**

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (✓) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

1. The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

2. The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government’s interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency’s SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions

Felony conviction: Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

Date

Signature

Company Name

Title

CERTIFICATION OF OFFEROR/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a “covered transaction”, must verify each lower tier participant of a “covered transaction” under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>.
2. Collecting a certification statement similar to the Certification of Offeror /Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

Date

Signature

Company Name

Title

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION

PART 0.C – WAGE RATES

Requirements of Chapter 104, HRS

Wages and Hours of Employees on Public Works Law

Chapter 104, HRS, applies to every public works construction project over \$2,000, regardless of the method of procurement or financing (purchase order, voucher, bid, contract, lease arrangement, warranty, SPRB).

Rate of Wages for Laborers and Mechanics

- Minimum prevailing wages (basic hourly rate plus fringe benefits), as determined by the Director of Labor and Industrial Relations and published in wage rate schedules, shall be paid to the various classes of laborers and mechanics working on the job site. [§104-2(a), (b), Hawaii Revised Statutes (HRS)]
- If the Director of Labor determines that prevailing wages have increased during the performance of a public works contract, the rate of pay of laborers and mechanics shall be raised accordingly. [§104-2(a) and (b), HRS; §12-22-3(d) Hawaii Administrative Rules (HAR)]

Overtime

- Laborers and mechanics working on a Saturday, Sunday, or a legal holiday of the State or more than eight hours a day on any other day shall be paid overtime compensation at not less than one and one-half times the basic hourly rate plus the cost of fringe benefits for all hours worked. If the Director of Labor determines that a prevailing wage is defined by a collective bargaining agreement, the overtime compensation shall be at the rates set by the applicable collective bargaining agreement [§§104-1, 104-2(c), HRS; §12-22-4.1, HAR]

Weekly Pay

- Laborers and mechanics employed on the job site shall be paid their full wages at least once a week, without deduction or rebate, except for legal deductions, within five working days after the cutoff date. [§104-2(d), HRS]

Posting of Wage Rate Schedules

- Wage rate schedules with the notes for prevailing wages and special overtime rates, shall be posted by the contractor in a prominent and easily accessible place at the job site. A copy of the entire wage rate schedule shall be given to each laborer and mechanic employed under the contract, except when the employee is covered by a collective bargaining agreement. [§104-2(d), HRS]

Withholding of Accrued Payments

- If necessary, the contracting agency may withhold accrued payments to the contractor to pay to laborers and mechanics employed by the contractor or subcontractor on the job site any difference between the wages required by the public works contract or specifications and the wages received. [§104-2(e), HRS]

Certified Weekly Payrolls and Payroll Records

- A certified copy of all payrolls shall be submitted weekly to the contracting agency. [§104-3(a), HRS; §12-22-10, HAR]
- The contractor is responsible for the submission of certified copies of the payrolls of all subcontractors. The certification shall affirm that the payrolls are correct and complete, that the wage rates listed are not less than the applicable rates contained in the applicable wage rate schedule, and that the classifications for each laborer or mechanic conform with the work the laborer or mechanic performed. [§104-3(a), HRS; §12-22-10, HAR]
- Payroll records shall be maintained by the contractor and subcontractors for three years after completion of construction. The records shall contain: [§104-3(a), HRS; §12-22-10, HAR]
 - the name and home address of each employee
 - the last four digits of social security number
 - a copy of the apprentice's registration with DLIR
 - the employee's correct classification
 - rate of pay (basic hourly rate + fringe benefits)
 - itemized list of fringe benefits paid
 - daily and weekly hours worked
 - weekly straight time and overtime earnings
 - amount and type of deductions
 - total net wages paid
 - date of payment
- Records shall be made available for inspection by the contracting agency, the Department of Labor and Industrial Relations (DLIR), or any of its authorized representatives, who may also interview employees during working hours on the job. [§§104-3(c), 104-22(a), HRS; §12-22-10, HAR]

Termination of Work on Failure to Pay Wages

- If the contracting agency finds that any laborer or mechanic employed on the job site by the contractor or any subcontractor has not been paid prevailing wages or overtime, the contracting agency may, by written notice to the contractor, terminate the contractor's or subcontractor's right to proceed with the work or with the part of the work in which the required wages or overtime compensation have not been paid. The contracting agency may complete this work by contract or otherwise, and the contractor or contractor's sureties shall be liable to the contracting agency for any excess costs incurred. [§104-4, HRS]

Apprentices and Trainees

- Apprentice wage rates apply to contractors who are a party to a bona fide apprenticeship program which has been registered with the DLIR. In order to be paid apprentice, apprentices must be parties to an agreement either registered with or recognized as a USDOL nationally approved apprenticeship program by the DLIR, Workforce Development Division, (808) 586-8877, and the apprentice must be individually registered by name with the DLIR. [§12-22-6(1) and (2), HAR]
- The number of apprentices on any public work in relation to the number of journeyworkers in the same craft classification as the apprentices employed by the same employer on the same public work may not exceed the ratio allowed under the apprenticeship standards registered with or recognized by the DLIR. A registered or recognized apprentice receiving the journeyworker rate will not be considered a journeyworker for the purpose of meeting the ratio requirement. [§12-22-6(3), HAR]

Enforcement

- To ensure compliance with the law, DLIR and the contracting agency will conduct investigations of contractors and subcontractors. If a contractor or subcontractor violates the law, the penalties are: [§104-24, HRS]
 - **First Violation** Equal to 25% of back wages found due or \$250 per offense up to \$2,500, whichever is greater.
 - **Second Violation** Equal to amount of back wages found due or \$500 for each offense up to \$5,000, whichever is greater.
 - **Third Violation** Equal to two times the amount of back wages found due or \$1,000 for each offense up to \$10,000, whichever is greater; and
Suspension from doing any new work on any public work of a governmental contracting agency for three years.
 - A violation would be deemed a second violation if it occurs within two years of the **first notification of violation**, and a third violation if it occurs within three years of **the second notification of violation**. [§104-24, HRS; §12-22-25(b), HAR]
 - **Suspension:** For a first or second violation, the department shall immediately suspend a contractor who fails to pay wages or penalties until all wages and penalties are paid in full. For a third violation, the department shall penalize and suspend the contractor as described above, **except that if the contractor continues to violate the law, then the department shall immediately suspend the contractor for a mandatory three years. The contractor shall remain suspended until all wages and penalties are paid in full.** [§§104-24, 104-25, HRS]
- **Suspension:** Any contractor who fails to make payroll records accessible or provide requested information within 10 days, or fails to keep or falsifies any required record, shall be assessed a penalty including suspension as provided in Section 104-22(b) and 104-25(a)(3), HRS. [§104-3(c), HRS; §12-22-26, HAR]
- If any contractor interferes with or delays any investigation, the contracting agency shall withhold further payments until the delay has ceased. Interference or delay includes failure to provide requested records or information within ten days, failure to allow employees to be interviewed during working hours on the job, and falsification of payroll records. The department shall assess a penalty of \$10,000 per project, and \$1,000 per day thereafter, for interference or delay. [§104-22(b), HRS; §12-22-26, HAR]
- Failure by the contracting agency to include in the provisions of the contract or specifications the requirements of Chapter 104, HRS, relating to coverage and the payment of prevailing wages and overtime, is not a defense of the contractor or subcontractor for noncompliance with the requirements of this chapter. [§104-2(f), HRS]



For additional information, visit the department's website at <http://labor.hawaii.gov/wsd> or contact any of the following DLIR offices:

- Oahu (Wage Standards Division) (808) 586-8777
- Hawaii Island (808) 322-4808
- Maui and Kauai (808) 243-5322

STATE OF HAWAII WAGE RATE SCHEDULE

(Not Physically Included in bid Documents)

FEDERAL WAGE RATES

Superseded General Decision Number: HI20220001

State: Hawaii

Construction Types: Building, Heavy (Heavy and Dredging), Highway and Residential

Counties: Hawaii Statewide.

BUILDING CONSTRUCTION PROJECTS; RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories); HEAVY AND HIGHWAY CONSTRUCTION PROJECTS AND DREDGING

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	01/13/2023
2	01/27/2023
3	02/17/2023
4	02/24/2023
5	03/10/2023
6	03/17/2023

ASBE0132-001 06/05/2022

	Rates	Fringes
Asbestos Workers/Insulator Includes application of all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems. Also the application of firestopping material for wall openings and penetrations in walls, floors, ceilings and curtain walls.....	\$ 42.80	25.85

BOIL0627-005 01/01/2021

	Rates	Fringes
BOILERMAKER.....	\$ 37.25	31.25

BRHI0001-001 09/05/2022

	Rates	Fringes
BRICKLAYER Bricklayers and Stonemasons.	\$ 47.24	31.33
Pointers, Caulkers and Weatherproofers.....	\$ 47.49	31.33

BRHI0001-002 09/05/2022

	Rates	Fringes
Tile, Marble & Terrazzo Worker Terrazzo Base Grinders.....	\$ 43.79	33.10
Terrazzo Floor Grinders and Tenders.....	\$ 42.24	33.10
Tile, Marble and Terrazzo Workers.....	\$ 45.60	33.10

CARP0745-001 10/01/2021

	Rates	Fringes
Carpenters: Carpenters; Hardwood Floor Layers; Patent Scaffold Erectors (14 ft. and over); Piledrivers; Pneumatic Nailers; Wood Shinglers and Transit		

and/or Layout Man.....	\$ 51.25	24.84
Millwrights and Machine Erectors.....	\$ 51.50	24.84
Power Saw Operators (2 h.p. and over).....	\$ 51.40	24.84

 CARP0745-002 10/01/2021

	Rates	Fringes
Drywall and Acoustical Workers and Lathers.....	\$ 51.50	24.84

 ELEC1186-001 08/22/2022

	Rates	Fringes
Electricians:		
Cable Splicers.....	\$ 60.51	30.90
Electricians.....	\$ 53.55	30.69
Telecommunication worker....	\$ 34.94	13.69

 ELEC1186-002 08/22/2022

	Rates	Fringes
Line Construction:		
Cable Splicers.....	\$ 60.51	30.90
Groundmen/Truck Drivers.....	\$ 40.16	25.34
Heavy Equipment Operators....	\$ 48.20	28.43
Linemen.....	\$ 53.55	30.69
Telecommunication worker....	\$ 34.94	13.69

 ELEV0126-001 01/01/2023

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 68.08	37.335+a+b

a. VACATION: Employer contributes 8% of basic hourly rate for 5 years service and 6% of basic hourly rate for 6 months to 5 years service as vacation pay credit.

b. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day and Christmas Day.

 ENGI0003-002 09/03/2018

	Rates	Fringes
Diver (Aqua Lung) (Scuba))		
Diver (Aqua Lung) (Scuba) (over a depth of 30 feet)...	\$ 66.00	31.26
Diver (Aqua Lung) (Scuba) (up to a depth of 30 feet)..	\$ 56.63	31.26
Stand-by Diver (Aqua Lung) (Scuba).....	\$ 47.25	31.26
Diver (Other than Aqua Lung)		
Diver (Other than Aqua Lung).....	\$ 66.00	31.26
Diver Tender (Other than Aqua Lung).....	\$ 44.22	31.26
Stand-by Diver (Other than		

Aqua Lung).....	\$ 47.25	31.26
Helicopter Work		
Airborne Hoist Operator		
for Helicopter.....	\$ 45.80	31.26
Co-Pilot of Helicopter.....	\$ 45.98	31.26
Pilot of Helicopter.....	\$ 46.11	31.26
Power equipment operator -		
tunnel work		
GROUP 1.....	\$ 42.24	31.26
GROUP 2.....	\$ 42.35	31.26
GROUP 3.....	\$ 42.52	31.26
GROUP 4.....	\$ 42.79	31.26
GROUP 5.....	\$ 43.10	31.26
GROUP 6.....	\$ 43.75	31.26
GROUP 7.....	\$ 44.07	31.26
GROUP 8.....	\$ 44.18	31.26
GROUP 9.....	\$ 44.29	31.26
GROUP 9A.....	\$ 44.52	31.26
GROUP 10.....	\$ 44.58	31.26
GROUP 10A.....	\$ 44.73	31.26
GROUP 11.....	\$ 44.88	31.26
GROUP 12.....	\$ 45.24	31.26
GROUP 12A.....	\$ 45.60	31.26
Power equipment operators:		
GROUP 1.....	\$ 41.94	31.26
GROUP 2.....	\$ 42.05	31.26
GROUP 3.....	\$ 42.22	31.26
GROUP 4.....	\$ 42.49	31.26
GROUP 5.....	\$ 42.80	31.26
GROUP 6.....	\$ 43.45	31.26
GROUP 7.....	\$ 43.77	31.26
GROUP 8.....	\$ 43.88	31.26
GROUP 9.....	\$ 43.99	31.26
GROUP 9A.....	\$ 44.22	31.26
GROUP 10.....	\$ 44.28	31.26
GROUP 10A.....	\$ 44.43	31.26
GROUP 11.....	\$ 44.58	31.26
GROUP 12.....	\$ 44.94	31.26
GROUP 12A.....	\$ 45.30	31.26
GROUP 13.....	\$ 42.22	31.26
GROUP 13A.....	\$ 42.49	31.26
GROUP 13B.....	\$ 42.80	31.26
GROUP 13C.....	\$ 43.45	31.26
GROUP 13D.....	\$ 43.77	31.26
GROUP 13E.....	\$ 43.88	31.26

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Fork Lift (up to and including 10 tons); Partsman (heavy duty repair shop parts room when needed).

GROUP 2: Conveyor Operator (Handling building material); Hydraulic Monitor; Mixer Box Operator (Concrete Plant).

GROUP 3: Brakeman; Deckhand; Fireman; Oiler; Oiler/Gradechecker; Signalman; Switchman; Highline Cableway Signalman; Bargeman; Bunkerman; Concrete Curing Machine (self-propelled, automatically applied unit on streets, highways, airports and canals); Leveeman; Roller (5 tons and under); Tugger Hoist.

GROUP 4: Boom Truck or dual purpose "A" Frame Truck (5 tons or less); Concrete Placing Boom (Building Construction); Dinky Operator; Elevator Operator; Hoist and/or Winch (one drum); Straddle Truck (Ross Carrier, Hyster and similar).

GROUP 5: Asphalt Plant Fireman; Compressors, Pumps, Generators and Welding Machines ("Bank" of 9 or more, individually or collectively); Concrete Pumps or Pumpcrete Guns; Lubrication and Service Engineer (Grease Rack); Screedman.

GROUP 6: Boom Truck or Dual Purpose "A" Frame Truck (over 5 tons); Combination Loader/Backhoe (up to and including 3/4 cu. yd.); Concrete Batch Plants (wet or dry); Concrete Cutter, Groover and/or Grinder (self-propelled unit on streets, highways, airports, and canals); Conveyor or Concrete Pump (Truck or Equipment Mounted); Drilling Machinery (not to apply to waterliners, wagon drills or jack hammers); Fork Lift (over 10 tons); Loader (up to and including 3 and 1/2 cu. yds); Lull High Lift (under 40 feet); Lubrication and Service Engineer (Mobile); Maginnis Internal Full Slab Vibrator (on airports, highways, canals and warehouses); Man or Material Hoist; Mechanical Concrete Finisher (Large Clary, Johnson Bidwell, Bridge Deck and similar); Mobile Truck Crane Driver; Portable Shotblast Concrete Cleaning Machine; Portable Boring Machine (under streets, highways, etc.); Portable Crusher; Power Jumbo Operator (setting slip forms, etc., in tunnels); Rollers (over 5 tons); Self-propelled Compactor (single engine); Self-propelled Pavement Breaker; Skidsteer Loader with attachments; Slip Form Pumps (Power driven by hydraulic, electric, air, gas, etc., lifting device for concrete forms); Small Rubber Tired Tractors; Trencher (up to and including 6 feet); Underbridge Personnel Aerial Platform (50 feet of platform or less).

GROUP 7: Crusher Plant Engineer, Dozer (D-4, Case 450, John Deere 450, and similar); Dual Drum Mixer, Extend Lift; Hoist and/or Winch (2 drums); Loader (over 3 and 1/2 cu. yds. up to and including 6 yards.); Mechanical Finisher or Spreader Machine (asphalt), (Barber Greene and similar) (Screedman required); Mine or Shaft Hoist; Mobile Concrete Mixer (over 5 tons); Pipe Bending Machine (pipelines only); Pipe Cleaning Machine (tractor propelled and supported); Pipe Wrapping Machine (tractor propelled and supported); Roller Operator (Asphalt); Self-Propelled Elevating Grade Plane; Slusher Operator; Tractor (with boom) (D-6, or similar); Trencher (over 6 feet and less than 200 h.p.); Water Tanker (pulled by Euclids, T-Pulls, DW-10, 20 or 21, or similar); Winchman (Stern Winch on Dredge).

GROUP 8: Asphalt Plant Operator; Barge Mate (Seagoing); Cast-in-Place Pipe Laying Machine; Concrete Batch Plant (multiple units); Conveyor Operator (tunnel); Deckmate; Dozer (D-6 and similar); Finishing Machine Operator (airports and highways); Gradesetter; Kolman Loader (and similar); Mucking Machine (Crawler-type); Mucking Machine (Conveyor-type); No-Joint Pipe Laying Machine; Portable Crushing and Screening Plant; Power Blade Operator (under 12); Saurman Type Dragline (up to and including 5 yds.); Stationary Pipe Wrapping, Cleaning and Bending Machine; Surface Heater and Planer Operator, Tractor (D-6 and similar); Tri-Batch Paver; Tunnel Badger; Tunnel Mole and/or Boring Machine Operator Underbridge Personnel Aerial Platform (over 50 feet of platform).

GROUP 9: Combination Mixer and Compressor (gunite); Do-Mor Loader and Adams Elegrader; Dozer (D-7 or equal); Wheel and/or Ladder Trencher (over 6 feet and 200 to 749 h.p.).

GROUP 9A: Dozer (D-8 and similar); Gradesetter (when required by the Contractor to work from drawings, plans or specifications without the direct supervision of a foreman or superintendent); Push Cat; Scrapers (up to and including 20 cu. yds); Self-propelled Compactor with Dozer; Self-Propelled, Rubber-Tired Earthmoving Equipment (up to and including 20 cu. yds) (621 Band and similar); Sheep's Foot; Tractor (D-8 and similar); Tractors with boom (larger than D-6, and similar).

GROUP 10: Chicago Boom; Cold Planers; Heavy Duty Repairman or Welder; Hoist and/or Winch (3 drums); Hydraulic Skooper (Koehring and similar); Loader (over 6 cu. yds. up to and including 12 cu. yds.); Saurman type Dragline (over 5 cu. yds.); Self-propelled, rubber-tired Earthmoving Equipment (over 20 cu. yds. up to and including 31 cu. yds.) (637D and similar); Soil Stabilizer (P & H or equal); Sub-Grader (Gurries or other automatic type); Tractors (D-9 or equivalent, all attachments); Tractor (Tandem Scraper); Watch Engineer.

GROUP 10A: Boat Operator; Cable-operated Crawler Crane (up to and including 25 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (up to and including 1 cu. yd.); Dozer D9-L; Dozer (D-10, HD41 and similar) (all attachments); Gradall (up to and including 1 cu. yd.); Hydraulic Backhoe (over 3/4 cu. yds. up to and including 2 cu. yds.); Mobile Truck Crane Operator (up to and including 25 tons) (Mobile Truck Crane Driver Required); Self-propelled Boom Type Lifting Device (Center Mount) (up to and including 25 tons) (Grove, Drott, P&H, Pettibone and similar); Trencher (over 6 feet and 750 h.p. or more); Watch Engineer (steam or electric).

GROUP 11: Automatic Slip Form Paver (concrete or asphalt); Band Wagon (in conjunction with Wheel Excavator); Cable-operated Crawler Cranes (over 25 tons but less than 50 tons); Cable-operated Power Shovel, Clamshell, Dragline and Backhoe (over 1 cu. yd. up to 7 cu. yds.); Gradall (over 1 cu. yds. up to 7 cu. yds.); DW-10, 20, etc. (Tandem); Earthmoving Machines (multiple propulsion power units and 2 or more Scrapers) (up to and including 35 cu. yds., "struck" m.r.c.); Highline Cableway; Hydraulic Backhoe (over 2 cu. yds. up to and including 4 cu. yds.); Leverman; Lift Slab Machine; Loader (over 12 cu. yds); Master Boat Operator; Mobile Truck Crane Operator (over 25 tons but less than 50 tons); (Mobile Truck Crane Driver required); Pre-stress Wire Wrapping Machine; Self-propelled Boom-type Lifting Device (Center Mount) (over 25 tons m.r.c); Self-propelled Compactor (with multiple-propulsion power units); Single Engine Rubber Tired Earthmoving Machine (with Tandem Scraper); Tandem Cats; Trencher (pulling attached shield).

GROUP 12: Clamshell or Dipper Operator; Derricks; Drill Rigs; Multi-Propulsion Earthmoving Machines (2 or more Scrapers) (over 35 cu. yds "struck"m.r.c.); Operators (Derricks, Piledrivers and Cranes); Power Shovels and Draglines (7 cu. yds. m.r.c. and over); Self-propelled rubber-tired Earthmoving equipment (over 31 cu. yds.) (657B and similar); Wheel Excavator (up to and including 750 cu. yds. per hour); Wheel Excavator (over 750 cu. yds. per hour).

GROUP 12A: Dozer (D-11 or similar or larger); Hydraulic

Excavators (over 4 cu. yds.); Lifting cranes (50 tons and over); Pioneering Dozer/Backhoe (initial clearing and excavation for the purpose of providing access for other equipment where the terrain worked involves 1-to-1 slopes that are 50 feet in height or depth, the scope of this work does not include normal clearing and grubbing on usual hilly terrain nor the excavation work once the access is provided); Power Blade Operator (Cat 12 or equivalent or over); Straddle Lifts (over 50 tons); Tower Crane, Mobile; Traveling Truss Cranes; Universal, Liebherr, Linden, and similar types of Tower Cranes (in the erection, dismantling, and moving of equipment there shall be an additional Operating Engineer or Heavy Duty Repairman); Yo-Yo Cat or Dozer.

GROUP 13: Truck Driver (Utility, Flatbed, etc.)

GROUP 13A: Dump Truck, 8 cu.yds. and under (water level); Water Truck (up to and including 2,000 gallons).

GROUP 13B: Water Truck (over 2,000 gallons); Tandem Dump Truck, over 8 cu. yds. (water level).

GROUP 13C: Truck Driver (Semi-trailer. Rock Cans, Semi-Dump or Roll-Offs).

GROUP 13D: Truck Driver (Slip-In or Pup).

GROUP 13E: End Dumps, Unlicensed (Euclid, Mack, Caterpillar or similar); Tractor Trailer (Hauling Equipment); Tandem Trucks hooked up to Trailer (Hauling Equipment)

BOOMS AND/OR LEADS (HOURLY PREMIUMS):

The Operator of a crane (under 50 tons) with a boom of 80 feet or more (including jib), or of a crane (under 50 tons) with leads of 100 feet or more, shall receive a per hour premium for each hour worked on said crane (under 50 tons) in accordance with the following schedule:

Booms of 80 feet up to but not including 130 feet or Leads of 100 feet up to but not including 130 feet	0.50
Booms and/or Leads of 130 feet up to but not including 180 feet	0.75
Booms and/or Leads of 180 feet up to and including 250 feet	1.15
Booms and/or Leads over 250 feet	1.50

The Operator of a crane (50 tons and over) with a boom of 180 feet or more (including jib) shall receive a per hour premium for each hour worked on said crane (50 tons and over) in accordance with the following schedule:

Booms of 180 feet up to and including 250 feet	1.25
Booms over 250 feet	1.75

 ENGI0003-004 09/04/2017

Rates Fringes

Dredging: (Boat Operators)		
Boat Deckhand.....	\$ 41.22	30.93
Boat Operator.....	\$ 43.43	30.93
Master Boat Operator.....	\$ 43.58	30.93
Dredging: (Clamshell or Dipper Dredging)		
GROUP 1.....	\$ 43.94	30.93
GROUP 2.....	\$ 43.28	30.93
GROUP 3.....	\$ 42.88	30.93
GROUP 4.....	\$ 41.22	30.93
Dredging: (Derricks)		
GROUP 1.....	\$ 43.94	30.93
GROUP 2.....	\$ 43.28	30.93
GROUP 3.....	\$ 42.88	30.93
GROUP 4.....	\$ 41.22	30.93
Dredging: (Hydraulic Suction Dredges)		
GROUP 1.....	\$ 43.58	30.93
GROUP 2.....	\$ 43.43	30.93
GROUP 3.....	\$ 43.28	30.93
GROUP 4.....	\$ 43.22	30.93
GROUP 5.....	\$ 37.88	26.76
Group 5.....	\$ 42.88	30.93
GROUP 6.....	\$ 37.77	26.76
Group 6.....	\$ 42.77	30.93
GROUP 7.....	\$ 36.22	26.76
Group 7.....	\$ 41.22	30.93

CLAMSHELL OR DIPPER DREDGING CLASSIFICATIONS

- GROUP 1: Clamshell or Dipper Operator.
- GROUP 2: Mechanic or Welder; Watch Engineer.
- GROUP 3: Barge Mate; Deckmate.
- GROUP 4: Bargeman; Deckhand; Fireman; Oiler.

HYDRAULIC SUCTION DREDGING CLASSIFICATIONS

- GROUP 1: Leverman.
- GROUP 2: Watch Engineer (steam or electric).
- GROUP 3: Mechanic or Welder.
- GROUP 4: Dozer Operator.
- GROUP 5: Deckmate.
- GROUP 6: Winchman (Stern Winch on Dredge)
- GROUP 7: Deckhand (can operate anchor scow under direction of Deckmate); Fireman; Leveeman; Oiler.

DERRICK CLASSIFICATIONS

- GROUP 1: Operators (Derricks, Piledrivers and Cranes).
- GROUP 2: Saurman Type Dragline (over 5 cubic yards).
- GROUP 3: Deckmate; Saurman Type Dragline (up to and including 5 yards).
- GROUP 4: Deckhand, Fireman, Oiler.

 ENGI0003-044 09/03/2018

Rates Fringes

Power Equipment Operators (PAVING)

Asphalt Concrete Material Transfer.....	\$ 42.92	32.08
Asphalt Plant Operator.....	\$ 43.35	32.08
Asphalt Raker.....	\$ 41.96	32.08

Asphalt Spreader Operator...	\$ 43.44	32.08
Cold Planer.....	\$ 43.75	32.08
Combination Loader/Backhoe (over 3/4 cu.yd.).....	\$ 41.96	32.08
Combination Loader/Backhoe (up to 3/4 cu.yd.).....	\$ 40.98	32.08
Concrete Saws and/or Grinder (self-propelled unit on streets, highways, airports and canals).....	\$ 42.92	32.08
Grader.....	\$ 43.75	32.08
Laborer, Hand Roller.....	\$ 41.46	32.08
Loader (2 1/2 cu. yds. and under).....	\$ 42.92	32.08
Loader (over 2 1/2 cu. yds. to and including 5 cu. yds.).....	\$ 43.24	32.08
Roller Operator (five tons and under).....	\$ 41.69	32.08
Roller Operator (over five tons).....	\$ 43.12	32.08
Screed Person.....	\$ 42.92	32.08
Soil Stabilizer.....	\$ 43.75	32.08

IRON0625-001 09/01/2022

	Rates	Fringes
Ironworkers:.....	\$ 45.00	39.00
a. Employees will be paid \$.50 per hour more while working in tunnels and coffer dams; \$1.00 per hour more when required to work under or are covered with water (submerged) and when they are required to work on the summit of Mauna Kea, Mauna Loa or Haleakala.		

LAB00368-001 09/05/2022

	Rates	Fringes
Laborers:		
Driller.....	\$ 41.00	24.25
Final Clean Up.....	\$ 30.45	19.57
Gunite/Shotcrete Operator and High Scaler.....	\$ 40.50	24.25
Laborer I.....	\$ 40.00	24.25
Laborer II.....	\$ 37.40	24.25
Mason Tender/Hod Carrier....	\$ 40.50	24.25
Powderman.....	\$ 41.00	24.25
Window Washer (bosun chair).\$	39.50	24.25

LABORERS CLASSIFICATIONS

Laborer I: Air Blasting run by electric or pneumatic compressor; Asphalt Laborer, Ironer, Raker, Luteman, and Handroller, and all types of Asphalt Spreader Boxes; Asphalt Shoveler; Assembly and Installation of Multiplates, Liner Plates, Rings, Mesh, Mats; Batching Plant (portable and temporary); Boring Machine Operator (under streets and sidewalks); Buggymobile; Burning and Welding; Chainsaw, Faller, Logloader, and Bucker; Compactors (Jackson Jumping Jack and similar); Concrete Bucket Dumpman; Concrete Chipping; Concrete Chuteman/Hoseman (pouring concrete) (the handling of the chute from ready-mix trucks for such jobs as walls, slabs, decks, floors, foundations, footings, curbs, gutters, and sidewalks); Concrete Core Cutter

(Walls, Floors, and Ceiling); Concrete Grinding or Sanding; Concrete: Hooking on, signaling, dumping of concrete for tremie work over water on caissons, pilings, abutments, etc.; Concrete: Mixing, handling, conveying, pouring, vibrating, otherwise placing of concrete or aggregates or by any other process; Concrete: Operation of motorized wheelbarrows or buggies or machines of similar character, whether run by gas, diesel, or electric power; Concrete Placement Machine Operator: operation of Somero Hammerhead, Copperheads, or similar machines; Concrete Pump Machine (laying, coupling, uncoupling of all connections and cleaning of equipment); Concrete and/or Asphalt Saw (Walking or Handtype) (cutting walls or flatwork) (scoring old or new concrete and/or asphalt) (cutting for expansion joints) (streets and ways for laying of pipe, cable or conduit for all purposes); Concrete Shovelers/Laborers (Wet or Dry); Concrete Screeding for Rough Strike-Off: Rodding or striking-off, by hand or mechanical means prior to finishing; Concrete Vibrator Operator; Coring Holes: Walls, footings, piers or other obstructions for passage of pipes or conduits for any purpose and the pouring of concrete to secure the hole; Cribbers, Shorer, Lagging, Sheeting, and Trench Jacking and Bracing, Hand-Guided Lagging Hammer Whaling Bracing; Curbing (Concrete and Asphalt); Curing of Concrete (impervious membrane and form oiler) mortar and other materials by any mode or method; Cut Granite Curb Setter (setting, leveling and grouting of all precast concrete or stone curbs); Cutting and Burning Torch (demolition); Dri Pak-It Machine; Environmental Abatement: removal of asbestos, lead, and bio hazardous materials (EPA and/or OSHA certified); Falling, bucking, yarding, loading or burning of all trees or timber on construction site; Forklift (9 ft. and under); Gas, Pneumatic, and Electric tools; Grating and Grill work for drains or other purposes; Green Cutter of concrete or aggregate in any form, by hand, mechanical means, grindstone or air and/or water; Grout: Spreading for any purpose; Guinea Chaser (Grade Checker) for general utility trenches, sitework, and excavation; Headerboard Man (Asphalt or Concrete); Heat Welder of Plastic (Laborers' AGC certified workers) (when work involves waterproofing for waterponds, artificial lakes and reservoir) heat welding for sewer pipes and fusion of HDPE pipes; Heavy Highway Laborer (Rigging, signaling, handling, and installation of pre-cast catch basins, manholes, curbs and gutters); High Pressure Nozzleman - Hydraulic Monitor (over 100# pressure); Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Magnesite and Mastic Workers (Wet or Dry)(including mixer operator);Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting): handling, placing and operation of nozzle; Operation, Manual or Hydraulic jacking of shields and the use of such other mechanical equipment as may be necessary; Pavement Breakers; Paving, curbing and surfacing of streets, ways, courts, under and overpasses, bridges, approaches, slope walls, and all other labor connected therewith; Pilecutters; Pipe Accessment in place, bolting and lining up of sectional metal or other pipe including corrugated pipe; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, HDPE, metallic or non-metallic, conduit, and any other stationary-type of tubular device used for conveying of any

substance or element, whether water, sewage, solid, gas, air, or other product whatsoever and without regard to the nature of material from which tubular material is fabricated; No-joint pipe and stripping of same, Pipewrapper, Caulker, Bander, Kettleman, and men applying asphalt, Laykold, treating Creosote and similar-type materials (6-inch) pipe and over); Piping: resurfacing and paving of all ditches in preparation for laying of all pipes; Pipe laying of lateral sewer pipe from main or side sewer to buildings or structure (except Contactor may direct work be done under proper supervision); Pipe laying, leveling and marking of the joint used for main or side sewers and storm sewers; Laying of all clay, terra cotta, ironstone, vitrified concrete, HDPE or other pipe for drainage; Placing and setting of water mains, gas mains and all pipe including removal of skids; Plaster Mortar Mixer/Pump; Pneumatic Impact Wrench; Portable Sawmill Operation: Choker setters, off bearers, and lumber handlers connected with clearing; Posthole Digger (Hand Held, Gas, Air and Electric); Powderman's Tender; Power Broom Sweepers (Small); Preparation and Compaction of roadbeds for railroad track laying, highway construction, and the preparation of trenches, footings, etc., for cross-country transmission by pipelines, electrical transmission or underground lines or cables (by mechanical means); Raising of structure by manual or hydraulic jacks or other methods and resetting of structure in new locations, including all concrete work; Ramming or compaction; Rigging in connection with Laborers' work (except demolition), Signaling (including the use of walkie talkie) Choke Setting, tag line usage; Tagging and Signaling of building materials into high rise units; Riprap, Stonepaver, and Rock Slinger (includes placement of stacked concrete, wet or dry and loading, unloading, signaling, slinging and setting of other similar materials); Rotary Scarifier (including multiple head concrete chipping Scarifier); Salamander Heater, Drying of plaster, concrete mortar or other aggregate; Scaffold Erector Leadman; Scaffolds: (Swing and hanging) including maintenance thereof; Scaler; Septic Tank/Cesspool and Drain Fields Digger and Installer; Shredder/Chipper (tree branches, brush, etc.); Stripping and Setting Forms; Stripping of Forms: Other than panel forms which are to be re-used in their original form, and stripping of forms on all flat arch work; Tampers (Barko, Wacker, and similar type); Tank Scaler and Cleaners; Tarman; Tree Climbers and Trimmers; Trencher (includes hand-held, Davis T-66 and similar type); Trucks (flatbed up to and including 2 1/2 tons when used in connection with on-site Laborers' work); Trucks (Refuse and Garbage Disposal) (from job site to dump); Vibra-Screed (Bull Float in connection with Laborers' work); Well Points, Installation of or any other dewatering system.

Laborer II: Asphalt Plant Laborer; Boring Machine Tender; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Chainman, Rodmen, and Grade Markers; Cleaning, clearing, grading and/or removal for streets, highways, roadways, aprons, runways, sidewalks, parking areas, airports, approaches, and other similar installations; Cleaning or reconditioning of streets, ways, sewers and waterlines, all maintenance work and work of an unskilled and semi-skilled nature; Concrete Bucket Tender (Groundman) hooking and unhooking of bucket; Concrete Forms; moving, cleaning, oiling and carrying to the next point of erection of all forms; Concrete Products Plant

Laborers; Conveyor Tender (conveying of building materials); Crushed Stone Yards and Gravel and Sand Pit Laborers and all other similar plants; Demolition, Wrecking and Salvage Laborers: Wrecking and dismantling of buildings and all structures, with use of cutting or wrecking tools, breaking away, cleaning and removal of all fixtures, All hooking, unhooking, signaling of materials for salvage or scrap removed by crane or derrick; Digging under streets, roadways, aprons or other paved surfaces; Driller's Tender; Chuck Tender, Outside Nipper; Dry-packing of concrete (plugging and filling of she-bolt holes); Fence and/or Guardrail Erector: Dismantling and/or re-installation of all fence; Finegrader; Firewatcher; Flagman (Coning, preparing, stablishing and removing portable roadway barricade devices); Signal Men on all construction work defined herein, including Traffic Control Signal Men at construction site; General Excavation; Backfilling, Grading and all other labor connected therewith; Digging of trenches, ditches and manholes and the leveling, grading and other preparation prior to laying pipe or conduit for any purpose; Excavations and foundations for buildings, piers, foundations and holes, and all other construction. Preparation of street ways and bridges; General Laborer: Cleaning and Clearing of all debris and surplus material. Clean-up of right-of-way. Clearing and slashing of brush or trees by hand or mechanical cutting. General Clean up: sweeping, cleaning, wash-down, wiping of construction facility and equipment (other than "Light Clean up (Janitorial) Laborer. Garbage and Debris Handlers and Cleaners. Appliance Handling (job site) (after delivery unloading in storage area); Ground and Soil Treatment Work (Pest Control); Gunite/Shotcrete Operator Tender; Junk Yard Laborers (same as Salvage Yard); Laser Beam "Target Man" in connection with Laborers' work; Layout Person for Plastic (when work involves waterproofing for waterponds, artificial lakes and reservoirs); Limbers, Brush Loaders, and Pilers; Loading, Unloading, carrying, distributing and handling of all rods and material for use in reinforcing concrete construction (except when a derrick or outrigger operated by other than hand power is used); Loading, unloading, sorting, stockpiling, handling and distribution of water mains, gas mains and all pipes; Loading and unloading of all materials, fixtures, furnishings and appliances from point of delivery to stockpile to point of installation; hooking and signaling from truck, conveyance or stockpile; Material Yard Laborers; Pipelayer Tender; Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, Creosote, and similar-type materials (pipe under 6 inches); Plasterer Laborer; Preparation, construction and maintenance of roadbeds and sub-grade for all paving, including excavation, dumping, and spreading of sub-grade material; Prestressed or precast concrete slabs, walls, or sections: all loading, unloading, stockpiling, hooking on of such slabs, walls or sections; Quarry Laborers; Railroad, Streetcar, and Rail Transit Maintenance and Repair; Roustabout; Rubbish Trucks in connection with Building Construction Projects (excluding clearing, grubbing, and excavating); Salvage Yard: All work connected with cutting, cleaning, storing, stockpiling or handling of materials, all cleanup, removal of debris, burning, back-filling and landscaping of the site; Sandblasting Tender (Pot Tender): Hoses and pots or markers; Scaffolds: Erection, planking and removal of all scaffolds used for support for lathers, plasters, brick layers, masons, and other construction trades crafts; Scaffolds: (Specially

designed by carpenters) laborers shall tend said carpenter on erection and dismantling thereof, preparation for foundation or mudsills, maintenance; Scraping of floors; Screeds: Handling of all screeds to be reused; handling, dismantling and conveyance of screeds; Setting, leveling and securing or bracing of metal or other road forms and expansion joints; Sheeting Piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; Shipwright Tender; Sign Erector (subdivision traffic, regulatory, and street-name signs); Sloper; Slurry Seal Crews (Mixer Operator, Applicator, Squeegee Man, Shuttle Man, Top Man); Snapping of wall ties and removal of tie rods; Soil Test operations of semi and unskilled labor such as filling sand bags; Stripper (Asphalt, Concrete or other Paved Surfaces); Tool Room Attendant (Job Site); Traffic Delineating Device Applicator; Underpinning, lagging, bracing, propping and shoring, loading, signaling, right-of-way clearance along the route of movement, The clearance of new site, excavation of foundation when moving a house or structure from old site to new site; Utilities employees; Water Man; Waterscape/Hardscape Laborers; Wire Mesh Pulling (all concrete pouring operations); Wrecking, stripping, dismantling and handling concrete forms an false work.

 LAB00368-002 09/05/2022

	Rates	Fringes
Landscape & Irrigation Laborers		
GROUP 1.....	\$ 27.25	15.80
GROUP 2.....	\$ 28.25	15.80
GROUP 3.....	\$ 22.15	15.80

LABORERS CLASSIFICATIONS

GROUP 1: Installation of non-potable permanent or temporary irrigation water systems performed for the purposes of Landscaping and Irrigation architectural horticultural work; the installation of drinking fountains and permanent or temporary irrigation systems using potable water for Landscaping and Irrigation architectural horticultural purposes only. This work includes (a) the installation of all heads, risers, valves, valve boxes, vacuum breakers (pressure and non-pressure), low voltage electrical lines and, provided such work involves electrical wiring that will carry 24 volts or less, the installation of sensors, master control panels, display boards, junction boxes, conductors, including all other components for controllers, (b) and metallic (copper, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe including all work incidental thereto, i.e., unloading, handling and distribution of all pipes fittings, tools, materials and equipment, (c) all soldering work in connection with the above whether done by torch, soldering iron, or other means; (d) tie-in to main lines, thrust blocks (both precast and poured in place), pipe hangers and supports incidental to installation of the entire irrigation system, (e) making of pressure tests, start-up testing, flushing, purging, water balancing, placing into operation all irrigation equipment, fixtures and appurtenances installed under this agreement, and (f) the fabrication, replacement, repair and servicing of landscaping and irrigation systems.

Operation of hand-held gas, air, electric, or self-powered tools and equipment used in the performance of Landscape and Irrigation work in connection with architectural horticulture; Choke-setting, signaling, and rigging for equipment operators on job-site in the performance of such Landscaping and Irrigation work; Concrete work (wet or dry) performed in connection with such Landscaping and Irrigation work. This work shall also include the setting of rock, stone, or riprap in connection with such Landscape, Waterscape, Rockscape, and Irrigation work; Grubbing, pick and shovel excavation, and hand rolling or tamping in connection with the performance of such Landscaping and Irrigation work; Sprigging, handseeding, and planting of trees, shrubs, ground covers, and other plantings and the performance of all types of gardening and horticultural work relating to said planting; Operation of flat bed trucks (up to and including 2 1/2 tons):.

GROUP 2. Layout of irrigation and other non-potable irrigation water systems and the layout of drinking fountains and other potable irrigation water systems in connection with such Landscaping and Irrigation work. This includes the layout of all heads, risers, valves, valve boxes, vacuum breakers, low voltage electrical lines, hydraulic and electrical controllers, and metallic (coppers, brass, galvanized, or similar) pipe, as well as PVC or other plastic pipe. This work also includes the reading and interpretation of plans and specifications in connection with the layout of Landscaping, Rockscape, Waterscape, and Irrigation work; Operation of Hydro-Mulching machines (sprayman and driver), Drillers, Trenchers (riding type, Davis T-66, and similar) and fork lifts used in connection with the performance of such Landscaping and Irrigation work; Tree climbers and chain saw tree trimmers, Sporadic operation (when used in connection with Landscaping, Rockscape, Waterscape, and Irrigation work) of Skid-Steer Loaders (Bobcat and similar), Cranes (Bantam, Grove, and similar), Hoptos, Backhoes, Loaders, Rollers, and Dozers (Case, John Deere, and similar), Water Trucks, Trucks requiring a State of Hawaii Public Utilities Commission Type 5 and/or type 7 license, sit-down type and "gang" mowers, and other self-propelled, sit-down operated machines not listed under Landscape & Irrigation Maintenance Laborer; Chemical spraying using self-propelled power spraying equipment (200 gallon capacity or more).

GROUP 3: Maintenance of trees, shrubs, ground covers, lawns and other planted areas, including the replanting of trees, shrubs, ground covers, and other plantings that did not "take" or which are damaged; provided, however, that re-planting that requires the use of equipment, machinery, or power tools shall be paid for at the rate of pay specified under Landscape and Irrigation Laborer, Group 1; Raking, mowing, trimming, and runing, including the use of "weed eaters", hedge trimmers, vacuums, blowers, and other hand-held gas, air, electric, or self-powered tools, and the operation of lawn mowers (Note: The operation of sit-down type and "gang" mowers shall be paid for at the rate of pay specified under Landscape & Irrigation Laborer, Group 2); Guywiring, staking, propping, and supporting trees; Fertilizing, Chemical spraying using spray equipment with less than 200 gallon capacity, Maintaining irrigation and sprinkler systems, including the staking, clamping, and adjustment of risers, and the adjustment and/or replacement

of sprinkler heads, (Note: the cleaning and gluing of pipe and fittings shall be paid for at the rate of pay specified under Landscape & Irrigation Laborer(Group 1); Watering by hand or sprinkler system and the performance of other types of gardening, yardman, and horticultural-related work.

LAB00368-003 09/05/2022

	Rates	Fringes
Underground Laborer		
GROUP 1.....	\$ 40.60	24.25
GROUP 2.....	\$ 42.10	24.25
GROUP 3.....	\$ 42.60	24.25
GROUP 4.....	\$ 43.60	24.25
GROUP 5.....	\$ 43.95	24.25
GROUP 6.....	\$ 44.20	24.25
GROUP 7.....	\$ 44.65	24.25

GROUP 1: Watchmen; Change House Attendant.

GROUP 2: Swamper; Brakeman; Bull Gang-Muckers, Trackmen; Dumpmen (any method); Concrete Crew (includes rodding and spreading); Grout Crew; Reboundmen

GROUP 3: Chucktenders and Cabletenders; Powderman (Prime House); Vibratorman, Pavement Breakers

GROUP 4: Miners - Tunnel (including top and bottom man on shaft and raise work); Timberman, Retimberman (wood or steel or substitute materials thereof); Blasters, Drillers, Powderman (in heading); Microtunnel Laborer; Headman; Cherry Picker (where car is lifted); Nipper; Grout Gunmen; Grout Pumpman & Potman; Gunite, Shotcrete Gunmen & Potmen; Concrete Finisher (in tunnel); Concrete Screed Man; Bit Grinder; Steel Form Raisers & Setters; High Pressure Nozzleman; Nozzleman (on slick line); Sandblaster-Potman (combination work assignment interchangeable); Tugger

GROUP 5: Shaft Work & Raise (below actual or excavated ground level); Diamond Driller; Gunite or Shotcrete Nozzleman; Rodman; Groundman

GROUP 6: Shifter

GROUP 7: Shifter (Shaft Work & Raiser)

PAIN1791-001 01/01/2023

	Rates	Fringes
Painters:		
Brush.....	\$ 40.50	30.84
Sandblaster; Spray.....	\$ 40.50	30.84

PAIN1889-001 07/01/2022

	Rates	Fringes
Glaziers.....	\$ 41.50	38.37

* PAIN1926-001 03/05/2023

	Rates	Fringes
Soft Floor Layers.....	\$ 39.77	33.80

PAIN1944-001 01/01/2023		

	Rates	Fringes
Taper.....	\$ 44.60	33.65

PLAS0630-001 09/05/2022		

	Rates	Fringes
PLASTERER.....	\$ 45.00	33.58

PLAS0630-002 08/31/2020		

	Rates	Fringes
Cement Masons:		
Cement Masons.....	\$ 42.65	32.29
Trowel Machine Operators....	\$ 42.80	32.29

PLUM0675-001 01/01/2023		

	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter...	\$ 50.98	29.30

ROOF0221-001 11/06/2022		

	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply).....	\$ 43.15	21.21

SHEE0293-001 03/05/2023		

	Rates	Fringes
Sheet metal worker.....	\$ 47.37	31.71

* SUHI1997-002 09/15/1997		

	Rates	Fringes
Drapery Installer.....	\$ 13.60 **	1.20
FENCE ERECTOR (Chain Link Fence).....	\$ 9.33 **	1.65

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave

for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates

the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION

PART 0.D – SPECIAL PROVISIONS

SPECIAL PROVISIONS

The following additional amendments to the General Provisions are applicable to this project:

1.3 DEFINITIONS is amended as follows:

The following definition shall be deleted in its entirety and replaced with the following:

“Subcontractor - An individual, partnership, firm, corporation, or joint venture, or other legal entity, as licensed or required to be licensed under Chapter 444, Hawaii Revised Statutes, as amended, which enters into an agreement with the Contractor to perform a portion of the work.”

Add the following to 1.3 Definitions:

“HAWAII ePROCUREMENT SYSTEM (HIePRO) - The State of Hawaii eProcurement System for issuing solicitations, receiving proposals and responses, and issuing notices of award.”

2.7 REQUEST FOR SUBSTITUTION OF SPECIFIED MATERIALS AND EQUIPMENT BEFORE BID OPENING is amended as follows:

1. The last sentence in the first paragraph (line 147 to 152) shall be replaced with the following:

“Where a bidder intends to use a material or equipment of an unspecified brand, make, or model, the bidder must submit a request to the Department for review and approval at the earliest date possible. Requests shall be submitted via email to the Contact person listed in HIePRO for the solicitation and also posted as a question in HIePRO under the question/answer tab referencing the email with the request. The request must be posted in HIePRO no later than seventeen (17) calendar days before the bid opening date, not including the bid opening date.”

2. The first sentence in the second paragraph (line 154 to 156) shall be replaced with the following:

“It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Department that the alternate brand is a qualified equivalent.”

2.8 PREPARATION AND DELIVERY OF BID is amended as follows: Last Paragraph (line 189 to 192) shall be replaced with the following:

“The bidder shall submit the proposal in HIePRO. The proposal shall be UPLOADED to HIePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be

considered. Original (wet ink) proposal documents are not required to be submitted. The award will be made based on proposals uploaded in HIePRO. Any and all other additional documents explicitly designated and labeled as CONFIDENTIAL OR PROPRIETARY shall be UPLOADED SEPARATELY to HIePRO. If there is a conflict between this specification and its HIePRO solicitation, the specifications shall govern and control unless otherwise specified.”

2.11 BID SECURITY is amended by deleting (a) and replacing it with:

“(a)Unless directed otherwise in the invitation for bids, each bid shall be accompanied by bid security which is intended to protect the Department against failure or refusal of a bidder to execute the contract for the work bid or to supply the required performance and payment bonds. Bid security shall be in an amount equal to at least five percent of the base bid and additive alternates. Bid security shall be in one of the following forms:

- (1) A deposit of legal tender;
- (2) A valid surety bid bond, underwritten by a company licensed to issue bonds in the State of Hawaii; or
- (3) A certificate of deposit; credit union share certificate; or cashier’s, treasurer’s, teller’s, or official check drawn by or a certified check accepted by a bank, savings institution, or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA) and payable at sight or unconditionally assigned to the Department. These instruments may be utilized only to a maximum of one hundred thousand dollars (\$100,000.00). if the required amount totals over one hundred thousand dollars (\$100,000.00), more than one instrument not exceeding one hundred thousand dollars (\$100,000.00) each and issued by different financial institutions shall be accepted.

If bidder elects options (1) or (3) above for its bid security, said bid security shall be in its original form and shall be submitted before the bid deadline to the Contract Office, Department of Transportation, Aliiaimoku Hale, 869 Punchbowl Street, Room 105, Honolulu, Hawaii 96813. Original surety bid bonds do not need to be submitted to the Contracts Office. Bidders are reminded that a copy of its bid bond shall be included with its bid uploaded to HIePRO.”

2.12 PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS is amended by deleting 2.12 PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS in its entirety and replacing with the following:

“2.12 PRE-OPENING MODIFICATION OF WITHDRAWAL OF BIDS. A bidder may withdraw or modify a proposal after the bidder submits the proposal in HIePRO. Withdrawal or modification of proposal must be completed before the time set for the receiving of bids.”

2.14 PUBLIC OPENING OF BIDS is amended by deleting 2.14 PUBLIC OPENING OF BIDS in its entirety.

4.12 UTILITIES AND SERVICES is amended as follows:

Add the following after the last paragraph:

"(e) Repairs and Outages.

- (1) The Contractor shall have available on 24-hour call sufficient specialty contractors, such as electrical and plumbing contractors, to repair any damage to existing facilities that might occur as a result of construction operations regardless of when the damage might occur.
- (2) Outage: Written requests for power outage, communication changes, and water and sewer connection outages shall be submitted to the Engineer at least seven (7) days in advance or as specified in other sections of these specifications. Outages will be restricted to non-peak operational hours between midnight and 6:00 a.m."

5.16 SUBCONTRACTING is amended as follows:

Add the following after the last paragraph:

"(e) The Specialty Items of work for this project are as follows:

Electrical
Drywall
Electronic Systems
Fire and Burglar Alarm
Painting
Fire Protection"

7.21 PUBLIC CONVENIENCE AND SAFETY - is hereby added to the General Provisions:

"It shall be especially noted by the Contractor that the area directly adjacent to the existing in use runways and taxiways, is an extremely hazardous area and that very strict controls will apply throughout the entire period required to complete all work within 500 feet from the edge of an in use runway and 180 feet from the edge of an in use taxiway.

The Contractor shall familiarize himself with the Airport Certification Manual available for review at the Airport Manager's Office and shall comply with its requirements.

The Contractor is responsible for the security of access points to the Airport Operational Area that are located within the limits of construction and will be fined \$1,000 per incident for any breach of security at these locations. All gates leading into the AOA shall be kept locked and if required to be open, the Contractor shall provide professional security guards to attend gates. The guards must be approved by the Director and shall be required to attend a training session conducted by the Airport Manager prior to gate assignment."

8.20 LIMITATION OF OPERATIONS: is hereby added to the General Provisions:

"The following limitations shall be observed by the Contractor when operating within 75 feet from the edge of any taxiway.

General - The Contractor shall schedule his operations to minimize interference with the movement of aircraft or passengers as may be required by the Engineer. The Contractor shall be responsible to alert all of his personnel to the location of power and signal cables installed for the operation of the airport. The Contractor shall control his operations in a manner to preclude any possible damage to those cables. Utility companies shall be notified by the Contractor one week before commencement of work. The Contractor shall give notice to the Engineer in writing, at least 168 hours before operating within 75 feet from the edge of any taxiway and the Engineer will assure himself that the Airport Management personnel are notified in sufficient time to publish the warning (NOTAM). The Contractor shall immediately repair any damages to the existing perimeter fence to prevent inadvertent entry to the Airport Operation Area (AOA).

Work in Vicinity of Runways and Taxiways in Use - Under the terms of this contract, it is intended that work shall be completed without disturbing the paved surface of existing runways and taxiways, unless shown otherwise on the plans. Aircraft traffic shall not be interrupted. The Contractor shall schedule to work within 75 feet of the taxiway as directed by the Airport Management. No ruts, holes, or open trenches of 3 inches or more in depth and no objects or material 3 inches or more in height shall be permitted within the safety area when the airfield is in operation in conformance to Federal Aviation Regulation Part 139. The Contractor is also informed that Airport Zoning Regulations dictate that a 'clear zone' be maintained 500 feet on each side of an active runway, to be known as a hazardous area. The Contractor shall comply with all regulations governing ground operations within hazardous areas. The following FAA Advisory Circulars or later versions and FAA Regulations specify these requirements:

AC 150/5210-5C Painting, Marking, and Lighting Vehicles
Used on an Airport, dated August 2007

AC 150/5340-1J Standards for Airport Markings

AC 150/5370-2E Operational Safety on Airports During
Construction, dated 1/17/03

FAA Regulations Objects Affecting Navigable Airspace Part
77

The Contractor shall keep all personnel and equipment off the areas not specifically designated for work under this Contract. At all times when the Contractor's equipment is not in use, the equipment shall be moved outside the hazardous areas to an area designated by the Engineer. Under no condition shall equipment be parked or material stored within the hazardous areas.

Failure on the part of the Contractor to abide by the above will result in suspension of work.

Authority of Control Tower Personnel - With the exception of actual construction methods, the airport control tower personnel will have full authority to control the Contractor's movements within the existing taxiway. When required, the Contractor shall maintain a constant radio vigil within all work areas and in addition shall keep at least one flagman on duty with the radio man. When notified by the control tower to temporarily halt operations, it shall be the duty of the flagman, through the use of appropriate methods (lighted flares shall not be used under any circumstances), to notify all operators of equipment and other personnel to cease work and move men and equipment off of hazardous areas.

Contractor shall provide, at his own expense, the necessary radio and equipment including a radio equipped mobile vehicle to maintain contact with control tower personnel at all times during job performance. A transceiver operating at a frequency designated by the Engineer to communicate with the Control Tower.

Marking of Hazardous Areas - The Engineer will designate areas that are hazardous for aircraft. The Contractor shall provide red blinker lights spaced not more than 50 feet apart around all hazardous areas and areas of work within 75 feet of any taxiway. Such systems shall be subject to approval by the Engineer. The Contractor shall have personnel on call 24 hours per day for the emergency maintenance of hazard markings.

The Contractor shall provide red flags not less than 20 inches square in addition to the red blinker lights. When danger flags are made of fabric, a wire stiffener shall be used to hold the flags in an extended position. Flags shall be so mounted that they do not produce a hazard. The red danger flags shall be spaced not more than 50 feet apart around all areas of work within 75 feet of any taxiway.

All systems proposed by the Contractor for lighting and barricading shall be submitted to the Engineer for review prior to installation. The Contractor shall install all flags, lighting and barricades as required by the Engineer. Such systems shall be subject to approval by the Engineer.

Storage of Equipment and Materials - At the end of each working shift, all of the Contractor's equipment shall be withdrawn to an area designated by the Engineer. The Contractor shall park all equipment in an orderly fashion and place a sufficient number of red flasher lights to identify these areas. Materials stored within the airport shall be so placed and the work shall, at all times, be so conducted as to cause no greater obstruction to the air and ground traffic than is considered necessary by the Engineer. No runways, taxiways or roadways shall be closed or opened, except by permission of the Engineer.

Blasting Operations - The Contractor shall notify the Engineer at least three (3) days before performing blasting operations as to the extent and timing of such operations, so that the Control Tower and other concerned parties can be informed.

Utilities - The Contractor shall provide for the protection of all utilities from damages in areas to be traversed by his vehicles and equipment. If required, buried cables and utility lines shall be protected by mounding earth over the cables or by any other method approved by the Engineer.

The Contractor shall notify representatives of the owner, agencies, and other affected organizations at least 48 hours prior to working in any area containing the facilities of these organizations.

Failure to notify the owning organization will prevent authorization to work in a specific area.

Archaeological Features - Any archaeological features such as petroglyphs, burial sites, and artifacts discovered or unearthed during the performance of the work shall immediately be brought to the attention of the Engineer and all work that would damage or destroy these features shall be discontinued. The Engineer will decide, after proper investigation, to salvage or abandon such artifacts."

8.21 OPERATION OF CONTRACTOR'S MOTOR VEHICLE AND PERSONNEL IN RESTRICTED AIR OPERATIONS AND MOVEMENT AREAS is hereby added to the General Provisions:

"The Contractor shall conform with the all sections of the "State of Hawaii, Department of Transportation, Airports Division, Contractor's Training Guide" pertaining to access and operation in the Airport Operation Area (AOA) hereinafter described as follows:

"A. Motor Vehicles in Airport Operation Area

For safety reasons, the operation of motor vehicles in the AOA must conform with all applicable State Airport rules and regulations."

B. Motor Vehicle Access Permit

Each motor vehicle operated in the AOA is required to:

1. Meet all State licensing registration and safety requirements and be specifically licensed for operation in the AOA.
2. Meet all insurance requirements.
3. Be restricted to operation by those persons qualified to drive the vehicle and in possession of a current Ramp Driver's License and applicable Motor Vehicle Operator's License.

C. The operators of motor vehicles in the AOA shall be responsible for meeting the following insurance requirements.

1. Licensed Vehicles

As a condition for authorization to enter the AOA, the Contractor shall provide evidence of vehicle liability insurance in the form of a Certificate of Insurance issued by an authorized insurance carrier. Automobile Liability and general Liability (combined single limit, Bodily Injury and Property Damage, per occurrence) shall be required in the applicable minimum limits specified below:

a. Daniel K. Inouye International Airport

- (1) Standard AOA clearance. . . \$5,000,000

(2) Limited AOA clearance \$1,000,000
Limited AOA clearance is defined as operations restricted to Diamond head and Ewa Concourses second level roadways and connecting third level main terminal roadway only, with entry and exit via Security Access Point "C" (Primary) and Access Point "A" (Secondary)

b. Other Airports

Standard AOA clearance\$1,000,000

Standard AOA clearance is defined as any portion of a public Airport from which the public is restricted by fences or appropriate signs and not leased or demised to anyone for exclusive use and shall include runways, taxiways, all ramp and apron areas, aircraft parking and storage areas, fuel storage areas, maintenance areas, and any other area of a public Airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft or used for embarkation or debarkation of passengers.

2. Unlicensed Vehicles

Airport Liability (or General Liability) shall be required in the applicable minimum limits specified below:

a. Daniel K. Inouye International Airport, Kahului Airport, and Ellison Onizuka Kona International Airport

AOA clearance \$5,000,000

b. All other Airports

AOA clearance \$1,000,000

3. Specifically name the State of Hawaii as additionally insured.

4. Indicate that the Airport Engineer will be provided with a 30-day written prior notice of policy cancellation or material change in coverage or conditions.

D. Operator's Permit

1. No person shall operate a motor vehicle on the AOA unless he holds and carries on his person a current Airport Motor Vehicle operator's permit issued by the State of Hawaii, Department of Transportation, Airports Division.
2. Operator's permits will only be issued to persons who apply through the Airport District Security Office and pass a written exam covering those portions of the Airport Rules and Regulation relating to the operation of vehicles in Airport Operations Areas.

E. Authorized Vehicles

1. Only vehicles considered operationally safe and necessary for the performance of this contract may be allowed to operate in the AOA.
2. All motor vehicles must be painted in such a manner so as to be easily identifiable and must carry the Contractor's name on each side. These signs may be of a temporary nature applied to the side windows or doors.

The lettering shall be in bold characters of a minimum of four (4) inches in height and one and one-half (1-1/2) inches in widths, the height of logos should be a minimum of six (6) inches.

3. The Contractor's operations on, over, across, and/or immediately adjacent to any runway and/or taxiway at a towered airport shall require the use of two-way radio communication. The Contractor shall obtain the necessary equipment at his own expense.
4. No person shall operate a motor vehicle on the AOA unless he holds and carries on his person a current Motor Vehicle Operator's Permit issued by the Airport Manager.
 - a. The Motor Vehicle Operator's Permit will be issued only to persons who apply through the Airport Security Section and pass a written exam covering those portions of the Airport Rules and Regulations relating to the operation of vehicles in the AOA.
 - b. Permits issued may be suspended or revoked for cause at any time by the Airports Division.

F. Airport Operation Area Construction Pass

1. Issuance of Airport Operation Area (AOA) Construction Passes shall be limited to contractors, subcontractors, companies, organizations, individuals engaged in authorized and approved construction activity which requires a continuing need for entry into the AOA or Airfield Movement Areas. Request letters for such passes must be made to the Airport District Manager's Office in accordance with the Contractors Training Guide or applicable District requirements.
2. As a condition for security area clearance, applicants must comply with Transportation Security Regulation 1542 which requires a ten-year background Criminal History Records Check for those individuals employed under this contract.

G. Access to Movement Areas

1. Movement areas shall mean all of the runways and taxiways of the Airport which are utilized for taxiing, takeoff, and landing of aircraft.
 - a. Any vehicle which requires access to the movement area shall be equipped with operational radio equipment capable of positive two-way contact with Tower/Ground Control.
 - b. Operators of vehicles in movement areas must possess knowledge and familiarity with restricted and airfield movement areas, operational rules, regulations, and procedures, or be under direct escort by individuals meeting all of the above requirements.
2. Vehicle Operations on Movement Areas
 - a. No vehicle shall proceed across any runway unless specifically cleared by Tower/Ground Control.
 - b. The operator of a vehicle in the movement area shall not leave his vehicle unless continuous radio contact is maintained with the Tower/Ground Control while he is away from his vehicle.

- c. Any vehicle proceeding onto the movement area between the hours of sunset and sunrise shall be equipped with an overhead flashing light which is visible for one (1) mile, unless such vehicle is being escorted by another vehicle so equipped.
- d. All vehicles operated on the movement area between sunrise and sunset except those being escorted, shall operate an overhead amber or red flashing beacon visible for at least one (1) mile; or display a flag at least three (3) feet square with orange and white checkered squares of not less than one (1) foot on each side.

H. Runway and Taxiway Closure

- 1. Requests for runway or taxiway closures, or for any work which affect operational conditions at the airport must be made in writing through the Airport Engineering Branch.
- 2. Temporarily closed runways require placement of yellow "X" markings (constructed of material such as fabric or plywood or other acceptable material) on top of the runway identification numerals at both ends of the closed runway.
- 3. Taxiway closures require placement of barricades with alternate orange and white markings at each end of the closed taxiway segment. Barricades must be supplemented with flashing red lights. The intensity of the lights and spacing for barricades, and lights must adequately define and delineate the hazardous area.

I. Gate Guards Furnished by Contractors

- 1. If a contractor is permitted by the airport to maintain operational control of an AOA Access Gate, entry through such gate shall be controlled by the posting of a gate guard.
 - a. Written instruction will be provided, outlining the guard's duties to enforce those requirements and provisions prescribed by the airport's security program to include all personnel and vehicle entry and access requirements.

- b. Procedures will be established to identify the actions which will be undertaken by the guard in calling for assistance.
- c. An approved emergency communications procedure will be established.

J. Compliance

- 1. The contractor shall comply with all regulations and rules governing the Air Operations Areas during construction, as specified in the following or later versions:
 - a. Hawaii Revised Statutes, Title 19, Administrative Rules for Public Airports.
 - b. Federal Aviation Administration Advisory Circular AC 150/5340-1, Standards for Airport Markings; AC 150/5370-2, Operational Safety on Airports During Constructions.

K. Enforcement Authorization

Act 21, Section 1, Section 261-17(a), HRS; Federal Aviation Administration Regulations, Part 139, Part 107.

L. Right of Rejection or Revocation

The State of Hawaii, Airports Division, reserves the right to withhold, deny or revoke any airport security clearance, licenses or permits to any individual or organization who fails to meet the prescribed or required access area clearance criteria to include background investigation information, or fails to observe or comply with established rules, regulations, and directives.

It should be clearly understood that such denial or revocation is based solely on airport security or safety considerations and does not in any way constitute a determination by the State with regard to private employment by any individual or organization."

- END OF SECTION -

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION

PART 0.E – REQUIRED FEDERAL AIRPORT IMPROVEMENT PROGRAM (AIP)
CONTRACT PROVISIONS

**NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO
ENSURE EQUAL EMPLOYMENT OPPORTUNITY**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade: **69.1%**

Goals for female participation in each trade: **6.9%**

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is Kapolei, Hawaii.

EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
3. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
7. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

STANDARD FEDERAL EQUAL EMPLOYEMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS

1. As used in these specifications:
 - a. “Covered area” means the geographical area described in the solicitation from which this contract resulted;
 - b. “Director” means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
 - c. “Employer identification number” means the Federal social security number used on the Employer’s Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
 - d. “Minority” includes:
 - 1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - 2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - 3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - 4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor’s or subcontractor’s failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and

such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions, including specific review of these items, with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally), the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.
 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.
 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

I. GENERAL

This project is subject to Title 49, Code of Federal Regulations, Part 26, entitled "Participation by Disadvantaged Business Enterprise in Department of Transportation Financial Assistance Programs," hereinafter referred to as the ("DBE Regulations") and is incorporated and made a part of this contract herein by this reference. The following shall be incorporated as part of the contract documents for compliance. If any requirements herein are in conflict with the general provisions or special provisions applicable to this project, the requirements herein shall prevail unless specifically superseded or amended in the special provisions or by addendum.

II. POLICY

It is the policy of the U.S. Department of Transportation ("USDOT") and the State of Hawaii, Department of Transportation and its political subdivisions ("Department") that Disadvantaged Business Enterprises ("DBE"), as defined in the DBE Regulations, have an equal opportunity to receive and participate in federally assisted contracts.

III. DBE ASSURANCES

Each contract signed with a prime contractor (and each subcontract the prime contractor signs with a subcontractor) shall include the following assurance:

"The contractor, sub-recipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate which may include, but is not limited to; 1) withholding monthly progress payments; 2) assessing sanctions; 3) liquidated damages; and/or 4) disqualifying the contractor from future bidding as non-responsible."

The prime contractor agrees to include the above statements in any subsequent contracts that it enters into with other contractors and shall require those contractors to include similar statements in further agreements.

IV. BIDDER/OFFEROR RESPONSIBILITIES

All bidders/offerors are required to register with the Department's OCR, DBE Section, using the Bidder Registration Form, which can be downloaded from the Department's website at <http://hidot.hawaii.gov/administration/ocr/dbe/dbe-program-forms/>. Certified DBEs are considered registered with the Department and are not required to submit a

Bidder Registration Form. All other bidders/offerors are required to complete this form which may be faxed to (808) 831-7944, e-mailed to HDOT-DBE@hawaii.gov, or mailed to the HDOT DBE Section at 200 Rodgers Boulevard, Honolulu, Hawaii, 96819. Registered bidders/offerors are posted on the website listed above.

Bidders/offerors, subcontractors, manufacturers, vendors or suppliers, and trucking companies shall fully inform themselves with respect to the requirements of the DBE Regulations. Particular attention is directed to the following matters:

- A. Bidders/offerors shall take all necessary steps to ensure that DBEs have an opportunity to participate in this contract.
- B. DBEs may participate as a consultant, prime contractor, subcontractor, trucking company, or vendor of materials or supplies. DBEs may also team with other DBEs or non-DBE firms as part of a joint venture or partnership.
- C. Agreements between a bidder/offeror and a DBE in which an DBE promises not to provide subcontracting quotations to other bidders/offerors are strictly prohibited.
- D. A DBE shall be certified by the Department under the appropriate North American Industry Classification System (NAICS) code and work in their registered field of work in order for credit to be allowed.
- E. Information regarding the current certification status of DBEs is available on the internet at <https://hdot.dbesystem.com/>.
- F. Commercially Useful Function (“CUF”). An DBE must perform a CUF. This means that an DBE must be responsible for the execution of a distinct element of the work, must carry out its responsibility by actually performing, managing, and supervising at least 30% of the work involved by using its own employees and equipment, must negotiate price, determine quality and quantity, order and install material (when applicable), and must pay for the material itself.¹

To determine whether an DBE is performing a CUF, the Department must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing, the DBE credit claimed for performance of the work, and other relevant factors. The prime contractor is responsible to ensure that the DBE performs a CUF.

V. PROPOSAL REQUIREMENTS

- A. DBEs must be certified by the bid opening date.

¹ The use of joint checks payable to an DBE subcontractor and supplier may be allowed to purchase materials and supplies under limited circumstances. See VII USE OF JOINT CHECKS UNDER THE DBE PROGRAM

- B. DBE subcontractors, manufacturers, suppliers, trucking companies, and any second tier subcontractors shall be listed on the respective DBE forms as specified below in order to receive credit.
- C. The following forms are due to the Department's Project Manager or designee **by the close of business, 4:30 P.M. Hawaii Standard Time (HST), five (5) days after bid opening:**²
1. DBE Confirmation and Commitment Agreement. This form must be signed by the bidder/offeror and each DBE subcontractor, manufacturer, supplier, or trucking company. Information to be provided on the form shall include, among other things, the project number, the DBE's NAICS codes, description of work, bid items with corresponding price information, prime contractor name and contact information DBE name and contact information and subcontractor name and contact information if the DBE is a second tier subcontractor.
 2. DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction. List the dollar amount of all subcontractors, manufacturers, suppliers, and trucking companies (both DBE and non-DBE firms). Bidder/offeror must also list the DBE project goal on this form (See paragraph D below regarding goal calculation). The bidder/offeror must submit documentation demonstrating how the DBE goal was met or how the bidder/offeror attempted to meet the goal if the goal was not met. This documentation shall include quotations for both DBE and non-DBE subcontractors when a non-DBE is selected over a DBE for the project. **Documentation of good faith efforts is required irrespective of whether the bidder/offeror met the DBE project goal.**
- The above forms must be complete and provide the necessary information to properly evaluate bids/proposals. Failure to provide any of the above shall be cause for bid/proposal rejection.**
- D. Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items and allowance items. This DBE contract goal is applicable to all the contract work performed for this project and is calculated as follows:
1. DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).

² In computing calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or holiday.

2. The Department shall adjust the bidder's/offeror's DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

VI. COUNTING DBE PARTICIPATION TOWARDS CONTRACT GOAL

- A. Count the entire amount of the portion of a contract (or other contract not covered by paragraph B below) that is performed by the DBE's own forces. Include the cost of supplies and materials obtained by the DBE for the work on the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate).
- B. Count the entire amount of fees or commissions charged by an DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a USDOT-assisted contract, toward DBE goals, provided the Department determines the fee to be reasonable and not excessive as compared with fees customarily allowed for similar services.
- C. When an DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself an DBE. Work that an DBE subcontracts to a non-DBE firm does not count toward DBE goals.
- D. When an DBE performs as a participant in a joint venture, count a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals.
- E. Count expenditures to an DBE contractor toward DBE goals only if the DBE is performing a CUF on that contract.
- F. The following is a list of appropriate DBE credit to be allowed for work to be performed by an DBE subcontractor. Count expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:
 1. If the materials or supplies are obtained from an DBE manufacturer, count 100 percent of the cost of the materials or supplies toward DBE goals;
 2. For purposes of determining DBE goal credit, a manufacturer is a firm that operates or maintains a factory or establishment that produces (on the premises) the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications;

3. If the materials or supplies are purchased from an DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE goals;
4. For purposes of determining DBE goal credit, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business;
5. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question;
6. A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in the DBE Regulations, if the person both owns and operates distribution equipment for the products. Any supplementing of a regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis;
7. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers;
8. With respect to materials or supplies purchased from an DBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided that the Department determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. Do not count any portion of the cost of the materials and supplies themselves toward DBE goals; however,
9. If a firm is not currently certified as an DBE in accordance with standards of this part at the time of the execution of the contract, do not count the firm's participation toward any DBE goals, except as provided for in §26.87(i);
10. Do not count the dollar value of work performed under a contract with a firm after it has ceased to be certified toward the Department's overall goal; and
11. Do not count the participation of an DBE subcontractor toward a contractor's final compliance with its DBE obligations on a contract until the amount being counted has actually been paid to the DBE.

G. The following factors are used in counting DBE participation for trucking companies:

1. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular

contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals;

2. The DBE must itself own and operate at least one (1) fully licensed, insured, and operational truck used on the contract;
3. The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs;
4. The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as an DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract;
5. The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE that leases trucks equipped with drivers from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the value of transportation services on the contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks equipped with drivers receives credit only for the fee or commission it receives as a result of the lease arrangement. If a recipient chooses this approach, it must obtain written consent from the appropriate Department operating administration.
EXAMPLE: DBE firm X uses two (2) of its own trucks on a contract, leases two (2) trucks from DBE Firm Y and six (6) trucks from non-DBE Firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four (4) of the six (6) trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight (8) trucks. With respect to the other two (2) trucks provided by Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks Firm X receives as a result of the lease with Firm Z;
6. The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.
EXAMPLE: DBE Firm X uses two (2) of its own trucks on a contract. It leases two (2) additional trucks from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all four (4) trucks; and
7. For purposes of determining whether a trucking firm performs a CUF, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

- H. The bidder/offeror may be a joint venture or partnership that has a certified DBE as a partner. A “Joint Venture” means an association between an DBE firm and one (1) or more other firms to carry out a single, for-profit, business enterprise for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract, and whose share in the capital contribution, control, management, risks and profits are commensurate with its ownership interest.
- I. Effects of a Summary Suspension of an DBE. When an DBE’s certification is suspended, the DBE may not be considered to meet a contract goal on a new contract and any work it does on a contract received during the suspension shall not be counted towards the overall goal. The DBE may continue to perform work under an existing contract executed before the DBE received a Notice of Suspension and may be counted towards the contract goal during the period of suspension as long as the DBE is performing a CUF under the existing contract.
- J. Effects of Decertification of an DBE. Should an DBE become decertified during the term of the subcontract for reasons beyond the control of and with no fault or negligence on the part of the contractor, the work remaining under the subcontract may be credited towards the contract goal, but are not included in the overall accomplishments.

Should the DBE be decertified after contract award and before notice to proceed, the contractor must still meet the DBE goal by either: a) withdrawing the subcontract from the DBE and expending good faith efforts to replace it with an DBE that is currently certified for that same work; or b) continuing with the subcontract with the decertified firm and expending good faith efforts to find other work not already subcontracted out to DBEs in an amount to meet the DBE goal either by; 1) increasing the participation of other DBEs on the project; 2) documenting good faith efforts; or 3) by a combination of the above.

VII. USE OF JOINT CHECKS UNDER THE DBE PROGRAM

- A. The following guidelines apply to the use of joint checks:
 - 1. The second party (typically the prime contractor) acts solely as a guarantor;
 - 2. The DBE must release the check to the supplier;
 - 3. The use of joint checks is a commonly recognized business practice;
 - 4. The Department must approve the use of joint checks prior to use by contractors and/or DBEs. As part of this approval process the Department will analyze industry practice to confirm that the use of joint checks is commonly employed outside of the DBE program for non-DBE subcontractors on both federal and state funded contracts. Using joint checks shall not be approved if it conflicts with other aspects of the DBE Regulations regarding CUF; and
 - 5. The Department will monitor the use of joint checks closely to avoid abuse.

- B. Contractors and DBEs should review the following general guidelines when determining whether to use joint checks closely to avoid abuse:
1. That standard industry practice applies to all contractors (federal and state contracts);
 2. Use of joint checks must be available to all subcontractors;
 3. Material industry sets the standard industry practice, not prime contractors;
 4. Short term, not to exceed reasonable time (i.e., one (1) year, two (2) years) to establish/increase a credit line with the material supplier;
 5. No exclusive arrangement between one (1) prime and one (1) DBE in the use of joint checks that might bring the independence of the DBE into question;
 6. Non-proportionate ratio of DBE's normal capacity to size of contract and quantity of material to be provided under the contract;
 7. The DBE is normally responsible to install and furnish the work item; and
 8. The DBE must be more than an extra participant in releasing the check to the material supplier.
- C. The Department shall allow the use of joint checks if the following general conditions are met:
1. DBE submits request to the Department for action;
 2. There is a formalized agreement between all parties that specify the conditions under which the arrangement shall be permitted;
 3. There is a full and prompt disclosure of the expected use of joint checks;
 4. The Department will provide prior approval;
 5. DBE remains responsible for all other elements of 49 CFR 26.55(c)(1);
 6. The agreement states clearly and determines that independence is not threatened because the DBE retains final decision making responsibility;
 7. The Department will determine that the request is not an attempt to artificially inflate DBE participation;
 8. Standard industry practice is only one (1) factor;
 9. The Department will monitor and maintain oversight of the arrangement by reviewing cancelled checks and/or certification statement of payment; and
 10. The Department will verify there is no requirement by prime contractor that the DBE is to use a specific supplier nor the prime contractor's negotiated unit price.

VIII. DEMONSTRATION OF GOOD FAITH EFFORTS FOR CONTRACT AWARD

- A. When a project goal is not met, the Department shall conduct the initial review of GFE submitted by the bidder/offeror and shall determine whether the bidder/offeror has performed the quality, quantity, and intensity of efforts that demonstrate a reasonably active and aggressive attempt to meet the contract goal in accordance with 49 CFR Part 26, Appendix A.

- B. The bidder/offeror bears the responsibility of demonstrating that it met the contract goal, or if the contract goal was not met, by documenting the GFE it made in an attempt to meet the goal. It is the sole responsibility of the bidder/offeror to submit any and all documents, logs, correspondence, and any other records or information to the Department that will demonstrate that the bidder/offeror made good faith efforts to meet the DBE goal.

- C. In its good faith evaluation, the Department shall perform the following as part of its evaluation: a) compare the bidder's/offeror's bid against the bids/offers of other bidders/offerors, and compare the DBEs and DBE work areas utilized by the bidder/offeror with the DBEs listed in other bids/offers submitted for this contract (If other bidders obtained DBEs in a particular work area in which the low bidder did not, the Department shall take this into consideration in its evaluation); b) verify contacts by bidders/offerors with DBEs; and c) compare the DBE and the categories of DBE work targeted by the bidder/offeror for participation in the contract, with the total pool of available DBEs ready, willing and able to perform work on each particular subcontract targeted by the bidder/offeror.

- D. Actions on the part of the bidder/offeror that will be considered demonstrative of good faith efforts include, but are not limited to, the following:
 - 1. Whether the bidder/offeror submitted the required information (i.e., DBE name, address, NAICS code, description of work, project name, and number), and dollar amounts for all subcontractors, within five (5) days of bid opening;
 - 2. Whether the bidder/offeror solicited through all reasonable and available means (e.g., attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform part or all of the work to be included under the contract. The Department will also consider whether the bidder/offeror solicited the participation of potential DBEs as early in the procurement process as practicable, and allowed sufficient time for the DBEs to properly inquire about the project and respond to the solicitation. The Department will also review whether the bidder/offeror took appropriate steps to follow up with interested DBEs in a timely manner to facilitate participation by DBEs in this project;
 - 3. Whether the bidder/offeror identified and broke up portions of work that can be performed by DBEs in order to increase the likelihood that an DBE will be able to participate, and that the DBE goal could be achieved (e.g., breaking out contract items into economically feasible units to facilitate DBE participation even when the bidder/offeror might otherwise prefer to self-perform these work items with its own forces);
 - 4. Whether the bidder/offeror made available or provided interested DBEs with adequate information about the plans, specifications, and requirements of the project in a timely manner, and assisted them in responding to the bidder's/offeror's solicitation;

5. Whether the bidder/offeror negotiated in good faith with interested DBEs. Evidence of such negotiations includes documenting: a) the names, addresses and telephone numbers of DBEs that were contacted; b) a description of the information that was provided to DBEs regarding the plans and specifications; and c) detailed explanation for not utilizing individual DBEs on the project;
6. Whether the bidder/offeror solely relied on price in determining whether to use an DBE. The fact that there may be additional or higher costs associated with finding and utilizing DBEs are not, by itself, sufficient reasons for a bidder's/offeror's refusal to utilize an DBE, or the failure to meet the DBE goal, provided that such additional costs are not unreasonable. Also, the ability or desire of a bidder/offeror to perform a portion of the work with its own forces, that could have been undertaken by an available DBE, does not relieve the bidder/offeror of the responsibility to make good faith efforts to meet the DBE goal, and to make available and solicit DBE participation in other areas of the project to meet the DBE goal;
7. Whether the bidder/offeror rejected DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The DBEs standing within the industry, membership in specific groups, organizations or associations, and political or social affiliation are not legitimate basis for the rejection or non-solicitation of bids from particular DBEs;
8. Whether the bidder/offeror made efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance;
9. Whether the bidder/offeror made efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services;
10. Whether the bidder/offeror effectively used the services of available minority/women community organizations, minority/women business groups, contractors' groups, and local, state and federal minority/women business assistance offices or other organizations to provide assistance in recruitment and placement of DBEs;
11. Whether the bidder/offeror, who selects a non-DBE over an DBE subcontractor, has quotes of each DBE and non-DBE subcontractor submitted to the bidder for work on the contract; and for each DBE that was contacted but not utilized by the bidder/offeror for a contract, the bidder/offeror has a detailed written explanation for each DBE detailing the reasons for the bidder's/offeror's failure or inability to utilize, or to allow the DBE to participate in the contract; and
12. Whether other bidders/offerors met the goal and whether the apparent successful bidder/offeror could have met the goal with additional efforts. The Department may determine that an apparent successful bidder/offeror who fell short of meeting the goal, made good faith efforts when it met or exceeded the average DBE participation obtained by other bidders/offerors.

IX. ADMINISTRATIVE RECONSIDERATION.

If it is determined by the Department that the apparent successful bidder/offeror has failed to meet the provisions of 49 CFR Section 26.53(a), the bidder/offeror may submit a request for administrative reconsideration. If under the provisions of 49 CFR, Section 26.53(d), it is determined by the Department that the apparent successful bidder/offeror has failed to meet the provisions of this subsection, the bidder/offeror may submit a written request for administrative reconsideration.

- A. Within five (5) working days of being informed in writing by the Department that the bidder/offeror has not documented sufficient GFE, a bidder/offeror may request administrative reconsideration. Bidders/offerors should make this request in writing to the following official:

Director of Transportation
Hawaii Department of Transportation
869 Punchbowl Street, Room 509
Honolulu, Hawaii 96813

- B. The reconsideration official, or his or her designee (referred to as “reconsideration official”), shall not have played any role in the original determination that the bidder/offeror failed to meet the goal or make adequate good faith efforts to do so.
- C. As part of this reconsideration, the bidder/offeror will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate GFE to do so. The bidder/offeror will have the opportunity to meet in person with the reconsideration official to discuss the issue of whether it met the goal or made adequate GFE to do so.
- D. In an administrative reconsideration, the reconsideration official will review all previously submitted documents, oral and written arguments, and other evidence presented in the reconsideration, in making the decision.
- E. The Department shall inform the bidder/offeror of the decision within thirty (30) days of the proceeding. The decision will state the Department’s findings, and explain the basis of those findings, with respect to whether or not the bidder/offeror met the contract goal, or whether or not the bidder/offeror made adequate GFE to achieve the contract goal.
- F. The reconsideration decision is not administratively appealable to USDOT but is appealable under HRS 103D-709.

X. AWARD OF CONTRACT

- A. In a sealed bid procurement, the Department reserves the right to reject any or all bids. The award of contract, if it is awarded, will be to the lowest responsive and responsible bidder who meets or exceeds the DBE project goal, or who makes

good faith efforts to meet or exceed the DBE project goal, as determined by the Department.

- B. If the lowest responsible bidder does not meet the DBE project goal and does not demonstrate to the satisfaction of the Department that it made good faith efforts to meet the DBE project goal, such bid shall be rejected as non-responsive. The Department will then consider the next lowest responsive and responsible bidder for award in accordance with paragraph A above.

XI. REPLACEMENT OF AN DBE ON A PROJECT WITH A CONTRACT GOAL

Under this contract, the prime contractor shall utilize the specific DBE listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department to replace an DBE. If the Department's consent is not provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE. The Department reserves the right to request copies of all DBE subcontracts.

The Department will require a contractor to make good faith efforts to replace an DBE that is terminated or has otherwise failed to complete its work on a contract with another certified DBE, to the extent needed to meet the contract goal. A prime contractor's inability to find a replacement DBE at the original price is not sufficient to demonstrate that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.

The Department will require the prime contractor to promptly provide written notice to the project manager of the DBE's inability or unwillingness to perform and provide reasonable documentation.

The written notice by the contractor must include the following:

1. The date the contractor determined the certified DBE to be unwilling, unable or ineligible to perform work on the contract;
2. The projected date that the contractor shall require a substitution or replacement DBE to commence work if consent is granted by the Department;
3. Documentation of facts that describe and cite specific actions or inactions on the part of the affected DBE that led to the contractor's conclusion that the DBE is unwilling, unable, or ineligible to perform work on the contract;
4. A brief statement of the affected DBE's capacity and ability or inability to perform the work as determined by the contractor;
5. Documentation of contractor's good faith efforts to enable affected DBE to perform the work;
6. The current percentage of work completed on each bid item by the affected DBE;

7. The total dollar amount currently paid per bid item for work performed by the affected DBE;
8. The total dollar amount per bid item remaining to be paid to the DBE for work completed but for which the DBE has not received payment, and with which the contractor has no dispute; and
9. The total dollar amount per bid item remaining to be paid to the DBE for work completed, for which the DBE has not received payment, and with which the contractor and DBE have a dispute.

The prime contractor shall send a copy of the written notice to replace a certified DBE on a contract to the affected DBE. The affected DBE may submit a written response within five (5) calendar days to the Department to explain its position on its performance on the committed work. The Department shall consider both the prime contractor's request and DBE's stated position before approving the termination or substitution request, or determining if any action shall be taken against the contractor.

There shall be no substitution or termination of an DBE subcontractor at any time without the prior written consent of the Department. The Department will provide written consent only if the contractor has good cause, as determined by the Department, to terminate the DBE. Good cause may include, but is not limited to the following circumstances:

1. The DBE subcontractor fails or refuses to execute a written contract;
2. The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards;
3. The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements;
4. The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
5. The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1200 or applicable state law;
6. The Department has determined that the listed DBE subcontractor is not a responsible contractor;
7. The listed DBE subcontractor voluntarily withdraws from the project and provides to the Department written notice of its withdrawal;
8. The listed DBE is ineligible to receive DBE credit for the type of work required; and
9. An DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

Upon approval from the Department to replace an DBE, the contractor's good faith efforts shall be documented and submitted to the Department within seven (7) calendar days. This time period may be extended for another seven (7) calendar days upon request by the prime contractor.

If an DBE subcontractor is unable to perform work under the contract, and is to be

replaced, the contractor's failure to obtain a substitute certified DBE or to make good faith efforts to obtain such a substitute DBE subcontractor to perform said work, may constitute a breach of this contract for which the Department may terminate the contract or pursue such remedy as deemed appropriate by the Department.

XII. CONTRACT COMPLIANCE

This contract is subject to contract compliance tracking, and the prime contractor and all subcontractors are required to report payments electronically in the HDOT online Certification and Contract Compliance Management System (hereafter referred to as "online tracking system"). The prime contractor shall report the date payment was made by the Department and shall report payment to all subcontractors for the audit period. The prime contractor and all subcontractors are responsible for responding by any noted response date or due date to any instructions or request for information, and to check the online tracking system on a regular basis to manage contact information and contract records.

The prime contractor is responsible for ensuring all subcontractors have completed all requested items and that their contact information is accurate and up-to-date. HDOT may require additional information related to the contract to be provided electronically through the online tracking system at any time before, during, or after contract award. Information related to contractor access of the online tracking system will be provided to designated point of contact with each contractor upon award of the contract. The online tracking system is web-based and can be accessed at the following Internet address: <https://hdot.dbesystem.com/>.

XIII. PAYMENT

- A. The Department will make an estimate in writing each month based on the items of work performed and materials incorporated in the work and the value therefore at the unit prices or lump sum prices set forth in the contract. All progress estimates and payments will be approximate only and shall be subject to correction at any time prior to or in the final estimate and payment. The Department will not withhold any amount from any payment to the contractor, including retainage.
- B. The contractor shall pay all subcontractors within ten (10) calendar days after receipt of any progress payments from the Department. This clause applies to both DBE and non-DBE subcontractors, and all tiers of subcontracts.
- C. The contractor will verify that payment or retainage has been released to the subcontractors or its suppliers within the specified time through entries in the Department's online tracking system during the corresponding monthly audits. Prompt payment will be monitored and enforced through the contractor's reporting of payments to its subcontractors and suppliers in the online tracking system.

Subcontractors, including lower tier subcontractors and/or suppliers will confirm the timeliness and the payment amounts received utilizing the online tracking system. Discrepancies will be investigated by the DBE Program Office and the project engineer. Payments to the subcontractors, including lower tier subcontractors, and including retainage released after the subcontractor or lower tier subcontractor's work has been completed to the Department's satisfaction, will be reported by the Contractor or the subcontractor.

- D. When any subcontractor has satisfactorily completed its work as specified in the subcontract, and there are no bona fide disputes, the contractor shall make prompt and full payment to the subcontractor of all monies due, including retainage, within ten (10) calendar days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented, as required by the Department. The contractor must obtain the prior written approval from the Department before it can continue to withhold retainage from any subcontractor who has completed its portion of the work. This clause applies to both DBE and non-DBE subcontractors, and all tiers of subcontracts.

XIV. RECORDS

The contractor shall maintain and keep all records necessary for the Department to determine compliance with the contractor's DBE obligations. The records shall be available at reasonable times and places for inspection by the Department and appropriate Federal agencies. The records to be kept by the contractor shall include:

1. The names, race/ethnicity, gender, address, phone number, and contact person of all DBE and non-DBE consultants, subcontractors, manufacturers, suppliers, truckers and vendors identified as DBEs;
2. The nature of work of each DBE and non-DBE consultant, subcontractor, manufacturer, supplier, trucker and vendor;
3. The dollar amount contracted with each DBE and non-DBE consultant, subcontractor, manufacturer, supplier, trucker and vendor; and
4. Cumulative dollar amount of all change orders to the subcontract.

XV. FAILURE TO COMPLY WITH DBE REQUIREMENTS

The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted contracts. All contractors, subcontractors, manufacturers and suppliers are hereby advised that failure to carry out all DBE requirements specified herein shall constitute a material breach of contract that may result in termination of the contract or such other remedy as deemed appropriate by the Department including but not limited to: 1) withholding monthly progress payments; 2) assessing sanctions; 3) liquidated damages; and/or 4) disqualifying the contractor from future bidding as non-responsible.

BUY AMERICAN PREFERENCE STATEMENT

The Buy American Preference requirement in 49 USC § 50101 requires that all steel and manufactured goods used on AIP projects be produced in the United States. The statute gives the FAA the ability to issue a waiver to a sponsor to use non-domestic material on an AIP funded project subject to meeting certain conditions. A sponsor may request that the FAA issue a waiver from the Buy American Preference requirements if the FAA finds that:

1. Applying the provision is not in the public interest;
2. The steel or manufactured goods are not available in sufficient quantity or quality in the United States;
3. The cost of components and subcomponents produced in the United States is more than 60 percent of the total components of a facility or equipment, and final assembly has taken place in the United States. Items that have an FAA standard specification item number (such as specific airport lighting equipment) are considered the equipment.
4. Applying this provision would increase the cost of the overall project by more than 25 percent.

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

Appendix X. Buy American Guidance

X-1. General Sponsor Buy American Requirements.

The Buy American Preferences under 49 USC § 50101 require that all steel and manufactured goods used in AIP funded projects be produced in the United States. Under 49 USC § 50101(c), ground transportation demonstration projects in 49 USC § 47127 are excluded. Sponsors must complete one of the three requirements in Table X-1 for the AIP projects (including ineligible or non-AIP funded work included in the same contract).

Table X-1 General Sponsor Buy American Requirements

All sponsors must complete one of the following for AIP funded projects...
(1) Certify, in writing, all products are wholly produced in America and are of 100% U.S. materials.
(2) Certify that all equipment that is being used on the project is on the Nationwide Buy American conformance list.
(3) Request a waiver to use non- U.S. produced products.

X-2. Other Buy American and Buy America Requirements.

There are other Buy American and Buy America preference rules and requirements imposed by other Federal agencies that may differ from the AIP Buy American guidance. That is because there are difference statutory requirements for other Federal agencies and grant programs that do not apply to AIP.

X-3. Changes Orders and Buy American Requirements.

A change order to a project requires a separate Buy American review and may require an ADO determination.

X-4. Buy American Waiver Process and Delegation.

Under 49 USC § 50101(b) and 49 CFR § 1.83(a)(11), the FAA is given the authority to waive these Buy American Preferences if certain market or product conditions exist. Many pieces of equipment are constructed with some non- U.S. produced components or subcomponents. Therefore, it is expected that the sponsor will have to request a waiver on a majority of projects (unless the project is constructed of materials that already have a nationwide waiver). These requirements only apply to manufactured components and subcomponents. Software is not considered a component or subcomponent.

The four types of Buy American waivers that the FAA may be issued are listed in Table X-2. The responsibility for Type I and II waivers, as well as any nationwide waivers remains with

APP-500. The ADOs have been delegated the authority to issue Type III and Type IV waivers to a sponsor on a project level.

Table X-2 Criteria by Buy American Waiver Type

For the following...	The following criteria apply...
Type I Waiver	Per 49 USC § 50101(b)(1), the FAA can issue this type of waiver if the FAA determines that applying the Buy American requirements would be inconsistent with the public interest. Due to the possible national implications of such a waiver, APP-500 is responsible for reviewing and issuing Type I Waivers.
Type II Waiver	Per 49 USC § 50101(b)(2), the FAA can issue this type of waiver for equipment or construction material if the FAA determines that the goods are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality. Type II Waivers can only be issued on the equipment/construction material level and cannot be issued for a system and/or facility that is comprised of various pieces of equipment/construction material. These waivers are issued by APP-500, after the FAA publishes a Federal Register Notice asking manufacturers to advise the FAA if they manufacture the equipment/material that is seeking a waiver and if their product meets the FAA specifications and Buy American requirements. After manufacturers respond to this notice, APP-500 will make a determination if there is insufficient quantity or quality.
Type III Waiver	<p>Per 49 USC § 50101(b)(3), the FAA can issue this type of waiver if the FAA determines that 60% or more of the components and subcomponents in the equipment/facility are of U.S. origin and their final assembly is in the United States. A Type III Waiver cannot be issued at the system level and must be issued for each piece of equipment; however, in the case of facilities a Type III Waiver may be issued for the entire facility if all the construction materials when combined meet the 60% U.S. origin requirement. The ADO may issue these waivers. For block grant state projects, only the FAA (usually the ADO) may issue the waivers. Block grant states are not allowed to issue a waiver. To complete a Type III Waiver request, the following supporting documentation must be submitted by the requester:</p> <ol style="list-style-type: none"> (1) A completed Buy American Content Percentage Calculation Worksheet (or equivalent) (see Appendix B for link). Per 49 USC § 50101(c), labor costs at final assembly must be excluded from this worksheet. This is because the Buy American statute is based on the cost of materials and equipment, not labor. (2) A completed Buy American Product Final Assembly Questionnaire (or equivalent) (see Appendix B for link). Final assembly in the United States must meet the standard defined below under Final Assembly Location. (3) The manufacturer must certify in writing that any major structural steel used in their equipment is of 100% U.S. origin. Small amounts of steel that are used in components and subcomponents, that are not structural steel, may be of foreign origin. This would typically consist of nuts, bolts and clips. For these types of steel, the manufacturer must indicate the use of the steel (nuts, bolts, clips, etc.) and must count this steel as non-U.S. origin when completing the Content Percentage Calculation Form. <p>Per FAA policy, after the ADO reviews the waiver request, the ADO must send a notification to the requester informing them of the approval or disapproval of the</p>

Table X-2 Criteria by Buy American Waiver Type

For the following...	The following criteria apply...
	<p>waiver. The ADO must use the following language in this notification for project specific waivers: <i>I have reviewed the request for Waiver of Buy American Requirement submitted by XXX for the use of XXXXX equipment on the subject project. The information submitted by XXXX satisfies the requirement for waiver of the requirements of 49 USC § 50101 based on XX% of the cost of components and subcomponents to be used in the project being produced in the United States with final assembly being performed in XXXXXXXX. The waiver is hereby approved for use on this AIP grant project.</i></p> <p>The ADO must place a copy of the notifications in the grant file. Following this notification, no further action is required.</p>
Type IV Waiver	<p>Per 49 USC § 50101(b)(4), the FAA can issue this type of waiver if the FAA determines that applying Buy American requirements increases the cost of the overall project by more than 25%. The ADO may issue these waivers. For block grant state projects, only the FAA (usually the ADO) may issue the waivers. Block grant states are not allowed to issue a waiver. In order to issue this type of waiver, the FAA must determine that there is at least one bid from a Buy American compliant supplier to make the 25% cost increase determination.</p> <p>Per FAA policy, after the ADO reviews the waiver request, the ADO must send a notification to the requester informing them of the approval or disapproval of the waiver. The ADO must use the following language in this notification for project specific waivers: <i>I have reviewed the request for Waiver of Buy American Requirement submitted by XXX for the use of XXXXX equipment on the subject project. The information submitted by XXXX satisfies the requirement for waiver of the requirements of 49 USC § 50101 that including domestic material will increase the cost of the overall project by more than 25%. The waiver is hereby approved for use on this AIP grant project.</i></p> <p>The ADO must place a copy of the notifications in the grant file. Following this notification no further action is required.</p>

X-5. National Buy American Waiver.

APP-500 may issue National Waivers for certain equipment/material that is used frequently in AIP funded projects. APP-500 will list these National Waivers on the FAA Office of Airports website under the Buy American Conformance List. Any equipment or materials on the Buy American Conformance List do not need additional waiver materials. All personnel not in APP-500 must direct any manufacturer seeking to be added to this Buy American Conformance List to APP-500.

X-6. Definitions.

To assist in making Buy American Waiver determinations the following definitions apply:

Table X-3 Buy American Specific Definitions

Buy American Waiver specific definitions include...
<p>a. Project. The <i>Project</i> is generally the project that is being bid or procured. The <i>Project</i> does not extend over multiple grants or phases, even though the overall project may be phased or may be built in multiple bid packages.</p>
<p>b. Facility or Equipment. This will be defined differently depending on the project. For a building, the portion of the building that is being funded under the AIP grant is the <i>facility</i> listed in the waiver. For other projects, the bid items as described in the current version of Advisory Circular 150/5370-10, Standards for Specifying Construction of Airports, will generally be the <i>equipment</i> referred to in the waiver except for airfield electrical equipment. For airfield electrical equipment, the L- items listed in the Addendum to the current version of Advisory Circular 150/5345-53, Airport Lighting Equipment Certification Program, will generally be the <i>equipment</i> referred to in the waiver. For a vehicle or single piece of equipment like a snow plow or ARFF vehicle, the single vehicle itself is the <i>equipment</i>.</p>
<p>c. Final Assembly Location. Final assembly is a process whereby assembly is meaningful and complex utilizing a substantial amount of time and resources, a number of different assembly operations, and a high level of skilled labor. The Final Assembly Questionnaire must be completed in order to determine whether final assembly occurs at the recorded site.</p>
<p>d. Nonavailable Items. By FAA policy, the list of items that have been determined nonavailable per 48 CFR § 25.104 are excluded from the Buy American preference requirements for AIP funded projects. This list includes petroleum products; therefore, asphalt is a nonavailable item per this list. In addition, the FAA has determined that cement and concrete are also nonavailable items excluded from the Buy American preference requirements (although the steel used for reinforcement, ties, stirrups, etc. must meet Buy American).</p>

49 U.S.C.

United States Code, 2009 Edition
Title 49 - TRANSPORTATION
SUBTITLE VII - AVIATION PROGRAMS
PART E - MISCELLANEOUS
CHAPTER 501 - BUY-AMERICAN PREFERENCES
Sec. 50101 - Buying goods produced in the United States
From the U.S. Government Publishing Office, www.gpo.gov

§50101. Buying goods produced in the United States

(a) PREFERENCE.—The Secretary of Transportation may obligate an amount that may be appropriated to carry out section 106(k), 44502(a)(2), or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102(e), 48106, 48107, and 48110) of this title for a project only if steel and manufactured goods used in the project are produced in the United States.

(b) WAIVER.—The Secretary may waive subsection (a) of this section if the Secretary finds that—

- (1) applying subsection (a) would be inconsistent with the public interest;
- (2) the steel and goods produced in the United States are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality;
- (3) when procuring a facility or equipment under section 44502(a)(2) or 44509, subchapter I of chapter 471 (except section 47127), or chapter 481 (except sections 48102(e), 48106, 48107, and 48110) of this title—

(A) the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment; and

(B) final assembly of the facility or equipment has occurred in the United States; or

(4) including domestic material will increase the cost of the overall project by more than 25 percent.

(c) LABOR COSTS.—In this section, labor costs involved in final assembly are not included in calculating the cost of components.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1298, §49101; renumbered §50101 and amended Pub. L. 104–287, §5(88)(D), (89), Oct. 11, 1996, 110 Stat. 3398.)

HISTORICAL AND REVISION NOTES

PUB. L. 103–272

<i>Revised Section</i>	<i>Source (U.S. Code)</i>	<i>Source (Statutes at Large)</i>
49101(a)	49 App.:2226a(a).	Nov. 5, 1990, Pub. L. 101–508, §9129, 104 Stat. 1388–371.
49101(b)	49 App.:2226a(b).	
49101(c)	49 App.:2226a(c).	

In this chapter, the word “goods” is substituted for “product” and “products” for consistency.

In subsection (a), the words “Notwithstanding any other provision of law” are omitted as surplus. The words “after November 5, 1990” are omitted as obsolete.

In subsection (b), before clause (1), the words “The Secretary may waive” are substituted for “shall not apply” for consistency. In clause (2), the words “steel and goods” are substituted for “materials and products” for consistency. In clause (4), the word “contract” is omitted as surplus.

Pue. L. 104–287, §5(89)

This makes a clarifying amendment to 49:50101(a) and (b)(3), 50102, 50104(b)(1), and 50105, as redesignated by clause (88)(D) of this section, because 49:47106(d) was struck by section 108(1) of the Federal Aviation Administration Authorization Act of 1994 (Public Law 103-305, 108 Stat. 1573).

AMENDMENTS

1996—Pub. L. 104-287, §5(88)(D), renumbered section 49101 of this title as this section.

Subsecs. (a), (b)(3). Pub. L. 104-287, §5(89), substituted “section 47127” for “sections 47106(d) and 47127”.

USE OF DOMESTIC PRODUCTS

Pub. L. 103-305, title III, §305, Aug. 23, 1994, 108 Stat. 1592, provided that:

“(a) PROHIBITION AGAINST FRAUDULENT USE OF ‘MADE IN AMERICA’ LABELS.—(1) A person shall not intentionally affix a label bearing the inscription of ‘Made in America’, or any inscription with that meaning, to any product sold in or shipped to the United States, if that product is not a domestic product.

“(2) A person who violates paragraph (1) shall not be eligible for any contract for a procurement carried out with amounts authorized under this title [enacting section 47509 of this title, amending sections 44505 and 48102 of this title, and enacting provisions set out as notes under this section and section 40101 of this title], including any subcontract under such a contract pursuant to the debarment, suspension, and ineligibility procedures in subpart 9.4 of chapter 1 of title 48, Code of Federal Regulations, or any successor procedures thereto.

“(b) COMPLIANCE WITH BUY AMERICAN ACT.—(1) Except as provided in paragraph (2), the head of each office within the Federal Aviation Administration that conducts procurements shall ensure that such procurements are conducted in compliance with sections 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a through 10c [41 U.S.C. 10a—10b-1], popularly known as the ‘Buy American Act’).

“(2) This subsection shall apply only to procurements made for which—

“(A) amounts are authorized by this title to be made available; and

“(B) solicitations for bids are issued after the date of the enactment of this Act [Aug. 23, 1994].

“(3) The Secretary, before January 1, 1995, shall report to the Congress on procurements covered under this subsection of products that are not domestic products.

“(c) DEFINITIONS.—For the purposes of this section, the term ‘domestic product’ means a product—

“(1) that is manufactured or produced in the United States; and

“(2) at least 50 percent of the cost of the articles, materials, or supplies of which are mined, produced, or manufactured in the United States.”

Similar provisions were contained in the following prior authorization act: Pub. L. 102-581, title III, §305, Oct. 31, 1992, 106 Stat. 4896.

PURCHASE OF AMERICAN MADE EQUIPMENT AND PRODUCTS

Pub. L. 103-305, title III, §306, Aug. 23, 1994, 108 Stat. 1593, provided that:

“(a) SENSE OF CONGRESS.—It is the sense of Congress that any recipient of a grant under this title [enacting section 47509 of this title, amending sections 44505 and 48102 of this title, and enacting provisions set out as notes under this section and section 40101 of this title], or under any amendment made by this title, should purchase, when available and cost-effective, American made equipment and products when expending grant monies.

“(b) NOTICE TO RECIPIENTS OF ASSISTANCE.—In allocating grants under this title, or under any amendment made by this title, the Secretary shall provide to each recipient a notice describing the statement made in subsection (a) by the Congress.”



**FAA
Office of Airports**

**Type I, II, III Equipment / Building, and IV Buy American Waivers Issued
(As of 10/7/2022)**

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

NOTICE: L-823 Connectors do not have independent utility needed to consider it as a component that warrants a Buy American waiver. For purposes of Buy American Preferences, the FAA considers these products as sub-components of the larger airfield lighting equipment being installed.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Potters Industries (Flex-O-Lite)	Reflective Media TTB 13215D Type IA (Flex-O-Lite) Glass Beads	8/27/2022
Type III Equipment/Building	GBA Components, LLC	Inpavement Light EB-83A Coated Bolts	8/7/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-850D(L) RSRT212XXXXFXXXX1 Inpavement Runway Threshold Light	7/30/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852A (LED) Model RSTA21XXXNXXX2X1 Inpavement Taxiway Centerline Light	7/17/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852B (LED) Model RSTB21XXXNXXX2X1 Inpavement Centerline Light	7/17/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852C (LED) Model RSTC21XXXNXXX2X1 Inpavement Taxiway Centerline Light	7/17/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852D (LED) Model RSTD21XXXNXXX2X1 Inpavement Centerline Light	7/17/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852J (LED) Model RSTJ21XXXCXXX2X1 Inpavement Taxiway Centerline Light	7/17/2022
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852K(LED) Inpavement Taxiway Centerline Light Model RSTK21XXXCXXX2X1	7/17/2022

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852S (LED) Model RSSB21XXXNRNX2X1 Inpavement Stop Bar Light	7/17/2022
Type III Equipment/Building	FLash Technology	L-880 (LED) Precision Approach Path Indicator	7/17/2022
Type III Equipment/Building	Flash Technology	Flash Technology L-881 (LED) Precision Approach Path Indicator	7/17/2022
Type III Equipment/Building	Potters Industries (Flex-O-Lite)	Reflective Media TT-B 1325D Type III (Flex-O-Lite) Glass Beads, 1.9 Index of Refraction	7/17/2022
Type III Equipment/Building	ADB Safegate	L-850A(L) RSRC11XXXNXXXXX1 Inpavement Runway Centerline Light	6/18/2022
Type III Equipment/Building	ADB Safegate	L-850B(L) RSRZ11XX1XWNXXX1 Inpavement Touchdown Zone Light	6/18/2022
Type III Equipment/Building	ADB Safegate	L-850C (L) RSRE11XXXCXXXXX1 Inpavement Runway Edge Light	6/18/2022
Type III Equipment/Building	ADB Safegate	L-850D(L) RSRN212XXXRXXXXX1 Inpavement Runway End Light	6/18/2022
Type III Equipment/Building	ADB Safegate	L-850T(L) RSRS21XX1NRNRXX1 Runway Status Light	6/18/2022
Type III Equipment/Building	M-B Companies, Inc.	Carrier Vehicle and Broom Attachment	5/21/2022
Type III Equipment/Building	Airport Lighting Company	L-821 Airport Lighting Control Panel	2/26/2022
Type III Equipment/Building	Airport Lighting Company	L-880 LED Precision Approach Path Indicator	2/26/2022

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Airport Lighting Company	L-881 LED Abbreviated Precision Approach Path Indicator	2/26/2022
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge L-862(L) ERES2YW33S00002	11/27/2021
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge Light L-862(L) ERES2GR13SF0002	11/27/2021
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge Light L-862(L) ERES2WY33S00002	11/27/2021
Type III Equipment/Building	Webasto Charging Systems Incorporated	Posicharge DVS 300 Electric Vehicle Charger	11/27/2021
Type III Equipment/Building	Multi-Electric Manufacturing	LEDE Runway Elevated Threshold End Light	9/18/2021
Type III Equipment/Building	Multi-Electric Manufacturing	LED Runway Elevated Edge - L-862 (L)	9/18/2021
Type III Equipment/Building	Airport Lighting Company	L-890 Lighting Control & Monitoring System	7/17/2021
Type III Equipment/Building	Airport Lighting Company	High Intensity Runway Edge Light, L-862 LED	5/8/2021
Type III Equipment/Building	Airport Lighting Company	L-861SE LED Medium Intensity Runway & Taxiway Edge Light	5/8/2021
Type III Equipment/Building	Airport Lighting Company	L-862 E LED High Intensity Runway Threshold Light	5/8/2021
Type III Equipment/Building	Hali-Brite Incorporated	L-801 A (LED) Medium Intensity Beacon	4/24/2021
Type III Equipment/Building	Hali-Brite Incorporated	L-802 A (LED) High Intensity Beacon	4/24/2021

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Musco Lighting	TLC for LED® Light-Structure System™ Apron Flood Lighting	4/11/2021
Type III Equipment/Building	Flight Light Inc.	L-810 Obstruction Light Single Head LED	4/3/2021
Type III Equipment/Building	Flight Light Inc.	L-810 Obstruction Light Double Head LED	4/3/2021
Type III Equipment/Building	Airport Lighting Company	L-847 Switch, Circuit Selector	3/20/2021
Type III Equipment/Building	ADB Safegate	L-849 -L Runway End Identification Lights - E1101012	8/8/2020
Type III Equipment/Building	Webasto Charging Systems, Incorporated	DVS 400 Electric Charging Station	5/2/2020
Type III Equipment/Building	Webasto Charging Systems, Incorporated	MVS 400 Electric Charging Station	5/2/2020
Type III Equipment/Building	Webasto Charging Systems, Incorporated	MVS800 Electric Charging Station	5/2/2020
Type III Equipment/Building	Hali-Brite Incorporated	L-893, Lighted Visual Aid to Indicate Temporary Runway Closure LED RCM-D L-893 (L)	4/26/2020
Type III Equipment/Building	Hali-Brite incorporated	L-893, Lighted Visual Aid to Indicate Temporary Runway Closure, LED RCM-D	4/26/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG01S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG01S00100	4/11/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG01SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG02S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG0ASL0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG0BSL0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG0CSL0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2NG0CSM0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG01S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG01SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG02S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG02S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG03S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG03S00100	4/11/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG03SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG03SF0100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG04S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG04S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG04SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG04SF0100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG05S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG05SC0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity	4/11/2020

EMIS2RG05SC0100			
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG06SC0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG07S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG07SC0000	4/11/2020

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Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG07SF0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG09S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG0BSM0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG0CSL0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN09SL0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG01S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR01S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR03S00100	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity	4/11/2020

EMIS2YY02S00100			
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6WY09S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8RG05SC0000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8RN05SC0000	4/11/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

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Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8RR05S00000	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG28SF0002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RN01S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR03S00102	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR35S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR38S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY28S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY31S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY33S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY33S00102	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RY35S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2WW31S00002	4/11/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

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Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2WW31S00102	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2WW33S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2WW33S00102	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2YG31SF0002	4/11/2020
Type III Equipment/Building	ADb Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR03S00002	4/11/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN05MI0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN05SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN05SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN09MI0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN09MI002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN11SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN15SF0002	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

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Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR08SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR11MF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR11SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR13MF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR13SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR13SM0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR15MF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR15SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR19SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR25MF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR25SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR29SF0002	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GW31SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GY33SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GY35SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG21SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG23SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG25SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG25SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG21MF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG21SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG23MF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG23SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG25SF0102	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG29SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG31SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RN01M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RN05S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RN09M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR01S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR03S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR15S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR25S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RR35S00002	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RW31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RY23S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RY31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RY31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RY35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WG31SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WR31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW31S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW33M00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW33S00002	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW33S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW35M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW35S01102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW39M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY31S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY33M00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY33S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY39M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY39S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YG33SF0102	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YG35SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR13S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR31M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR39M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YR39S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW31S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW33M00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW33S00102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW35M00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW39M00002	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW39S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN05SI0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN11SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN13SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN13SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GN18SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR05SI0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR11SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR11SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR12SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR13SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR15SF0002	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GR18SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GY31SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GY33SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GY33SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2GY35SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2NG21SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2NG23SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2NG23SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2NG28SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG21SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG22SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG23SF0002	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG23SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG25SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RN05S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RR01S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862(L) High Intensity Runway Edge Light EREL2GN13SF0102	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG21SF0002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WW35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2WY35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2YW35S00002	4/4/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity ERES2RG21SF0002	4/4/2020
Type III Equipment/Building	ADB safegate	L-862 Lights, Runway Edge, High Intensity EREL2RG25SF0002	4/4/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-826 L L-862 Lights, Runway Edge, High Intensity EREL 24 IN N/G W/ARC 1.5 CPLG 12 FAA	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 14 IN G/N N/ARC 2 CPLG 11.5	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 14 IN G/N W/ARC 2 CPLG 11.5	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 14 IN G/R W/ARC 2 CPLG 11.5 FAA	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 24 IN G/N W/ARC 1.5 CPLG 12	3/15/2020
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL 24 IN G/Y W/ARC 1.5 CPLG 12 FAA	3/15/2020
Type III Equipment/Building	Safety Coatings Inc	Marking TTP-1952F Type I Black	3/15/2020
Type III Equipment/Building	Safety Coatings Inc	Marking TTP-1952F Type I Blue	3/15/2020
Type III Equipment/Building	Safety Coatings Inc	Marking TTP-1952F Type I Red	3/15/2020
Type III Equipment/Building	Safety Coatings Inc	Marking TTP1952F Type I L.F. Yellow	3/15/2020
Type III Equipment/Building	Safety coatings Inc	Marking Type 1952F Type I White	3/15/2020
Type III Equipment/Building	Diamond Vogel	Marking - 7503 Blue Waterborne Traffic Paint	2/17/2020

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Diamond Vogel	Marking - UC 1509 White Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Diamond Vogel	Marking - UC 3584 Yellow Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Diamond Vogel	Marking - UC 5503 Red Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Diamond Vogel	Marking - UC 9507 Black Waterborne Traffic Paint	2/17/2020
Type III Equipment/Building	Avlite Systems	L-880 LED Precision Approach Path Indicator	1/24/2020
Type III Equipment/Building	Avlite Systems	L-881 LED Abbreviated Precision Approach Path Indicator	1/24/2020
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG04S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG07S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR01S00100	12/7/2019

Type III Equipment/Building

ADB Safegate

L-861 Lights, Runway & Taxiway Edge,
Medium Intensity EMIS2WR03S00000

12/7/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR07S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW01S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW02S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW02S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity	12/7/2019

EMIS2WW04S00000			
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW04S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW05S00000	12/7/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW05S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW06S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW07S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW09SL0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW09SM0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0ASL0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0ASM0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0BSL0000	12/7/2019

Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0BSM0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0CSL0000	12/7/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WW0CSM0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY01S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY02S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY02S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity	12/7/2019

EMIS2WY04S00100			
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY05S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY05S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY06S00000	12/7/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY07S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WY09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG02S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YG04S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity	12/7/2019

EMIS2YN03S00100			
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YR04S00000	12/7/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY01S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY01S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY03S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY03S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY04S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2YY04S00100	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6NG09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6NR09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6RG09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS6WW09S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8RR05SC0000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity	12/7/2019

EMIS8WW05S00000

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS8WY05S00000	12/7/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RG09SM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN09SM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0ASL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0ASM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0BSL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0BSM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0CSL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RN0CSM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR01S00000	11/23/2019

Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR01S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR02S00000	11/23/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR03S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR03S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR04S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR04S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR07S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RR09S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW09SL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW09SM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0ASL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0ASM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0BSL0000	11/23/2019

Type III Equipment/Building

ADB Safegate

L-861 Lights, Runway & Taxiway
Edge, Medium Intensity
EMIS2RW0BSM0000

11/23/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0CSL0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2RW0CSM0000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG01S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG01S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG03S00000	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WG03S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861 Lights, Runway & Taxiway Edge, Medium Intensity EMIS2WR04S00100	11/23/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG03S00100	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG03S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG03SF0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG04S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG04S00100	11/16/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG07S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG09SL0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NG09SM0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR01S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR01S00100	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR03S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR03S00100	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR04S00000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2NR04S00100	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2RG0ASL0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2RG0ASM0000	11/16/2019
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2RG0BSL0000	11/16/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861(L) Medium Intensity Runway Edge Light EMIS2RG0CSM0000	11/16/2019
Type III Equipment/Building	Vaisala	In-Pavement Stationary Runway Weather Information System RWS200	11/16/2019
Type III Equipment/Building	Astronics DME	L-852S Inpavement Taxiway Lights L-R- 1-0	10/26/2019
Type III Equipment/Building	Astronics DME	L-852T-L 1 G2 Inpavement Taxiway Lights	10/26/2019
Type III Equipment/Building	Astronics DME	L-852X Inpavement Taxiway Lights L-G2	10/26/2019
Type III Equipment/Building	Astronics DME	L-852X-L G2 Inpavement Taxiway Lights	10/26/2019
Type III Equipment/Building	Astronics DME	L-862L High Intensity runway Edge Lights	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 Black Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 Green Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 Red Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 White Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Franklin Paint Company	P-620 Yellow Waterborne Traffic Paint	10/26/2019
Type III Equipment/Building	Millerbernd Manufacturing Company	L-867 Light Base, Non-Load Bearing	10/26/2019
Type III Equipment/Building	Millerbernd Manufacturing Company	L-868 Light Base, Load Bearing	10/26/2019
Type III Equipment/Building	Millerbernd Manufacturing Company	L-894 Elevated Light Cover 12"	10/26/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Millerbernd Manufacturing Company	L-894 Elevated Light Cover 16"	10/26/2019
Type III Equipment/Building	Wix Support Equipment	Electric Vehicle Charging Station Cable Mangement System	10/26/2019
Type III Equipment/Building	ADB Safegate	L-862 (L) High Intensity Runway Edge Light EREL2GN13SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN13SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN15SF0002	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GN15SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GR15SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2GY33SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-862 Lights, Runway Edge, High Intensity EREL2NG23SF0102	10/19/2019
Type III Equipment/Building	ADB Safegate	L-861 L Runway & Taxiway Edge Medium Intensity Lights	10/1/2019
Type III Equipment/Building	ADB Safegate	L-862 E L Runway Edge High Intensity Lights ERES2WW35S00002	10/1/2019
Type III Equipment/Building	ADB Safegate	L-862 Runway Edge High Intensity Lights EREL2RG21SF0002	10/1/2019

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-862 Runway Edge High Intensity Lights EREL2WW35S00002	10/1/2019
Type III Equipment/Building	Minit charger, LLC	ALT22-480-1 Altus 22kW Dual Port Charger with BIW Cables	10/1/2019
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 E LED Inpavement Taxiway Light	10/22/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 F LED Inpavement Taxiway Light	10/22/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 S LED Inpavement Taxiway Light	10/22/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 T LED Inpavement Taxiway Light	10/22/2018
Type III Equipment/Building	Astronics DME Corporation	L-804 V Holding Poision Edge Light	8/27/2018
Type III Equipment/Building	Astronics DME Corporation	L-829 Monitored Constant Current Regulator	8/27/2018
Type III Equipment/Building	Astronics DME Corporation	L-849 I LED Runway End Indentification Lights	8/27/2018
Type III Equipment/Building	Astronics DME Corporation	L-850 A LED Runway Inpavement Lights	8/27/2018
Type III Equipment/Building	Astronics DME Corporation	L-850 B LED Runway Inpavement Lights	8/27/2018
Type III Equipment/Building	Astronics DME Corporation	L-850 T Runway Inpavement Light	8/27/2018
Type III Equipment/Building	Astronics DME Corporation	L-858 Runway and Taxiway Signs	8/27/2018
Type III Equipment/Building	Kodiack America, LLC	Snow Removal Equipment - Dual Engine Chassis w/ Rwy Broom & Air Blast	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 A LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 B LED Inpavement Runway Light	8/27/2018

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 D LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 E LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-850 T LED Inpavement Runway Light	8/27/2018
Type III Equipment/Building	Ennis-Flint Company	P-620 AirMark Preformed Thermoplastic Pavement Markings	8/4/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 A LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 B LED Inpavement Taxiay Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 C LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 D LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 J LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Multi-Electric Mfg., Inc.	L-852 K LED Inpavement Taxiway Light	7/29/2018
Type III Equipment/Building	Airport Lighting Company	L-828 Constant Current Regulator	7/24/2018
Type III Equipment/Building	Airport Lighting Company	L-829 Monitored Constant Current Regulator	7/24/2018
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 G LED Inpavement Taxiaway Light	7/22/2018
Type III Equipment/Building	Hughey & Phillips	L-810 Low Intensity LED , Double, VAC	1/21/2017
Type III Equipment/Building	Hughey & Phillips	L-810 Low Intensity LED, Single, VAC	1/21/2017
Type III Equipment/Building	Astronics DME Corporation	L-858 B LED Runway Runway & Taxiway Signs	10/17/2016

Type III Equipment/Building	Astronics DME Corporation	L-858 L LED Runway & Taxiway Signs	10/17/2016
Type III Equipment/Building	Astronics DME Corporation	L-858 R LED Runway & Taxiway Signs	10/17/2016
Type III Equipment/Building	Eaton Crouse-Hinds	L-850 C Runway Inpavement Lights	10/10/2016
Type III Equipment/Building	Vaisala	AW20, AWOS III	8/1/2016

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS A	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS AV	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS I	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS II	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS III	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS IIIP	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS IIIPT	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS IIIT	8/1/2016
Type III Equipment/Building	Vaisala	AW20-SPLIT, AWOS IV Z	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS A	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS AV	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS II	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS IIIP	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS IIIPT	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS IIIT	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWOS IV Z	8/1/2016
Type III Equipment/Building	Vaisala	AW20-STA, AWS I	8/1/2016
Type III Equipment/Building	Jaquith Industries	L-894 12" Elevated Light Cover Baseplate	5/17/2016
Type III Equipment/Building	Jaquith Industries	L-894 16" Elevated Light Cover Baseplate	5/17/2016
Type III Equipment/Building	Jaquith Industries	L-895 Light Mounting Stake	5/17/2016

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	The Sherwin-Williams Company	P-620, 1952, TT-P-Hotline Waterborne Durable Type III - White Marking Paint TM2452	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, 1952, TT-P-Hotline Waterborne Durable Type III - Yellow Marking Paint TM2453	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P- 1952, Hotline Waterborne Type I/II - Yellow Marking Paint TM2259	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Hotline Waterborne Type I/II w Algaecide, Fungicide, & Rust Inhibitor - Red Marking Paint TM2544	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Hotline Waterborne Type I/II - White Marking Paint TM2152	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Hotline Waterborne Type III w Algaecide, Fungicide, & Rust Inhibitor - White Marking Paint TM2564	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Durable Type III - Black Marking Paint TM2140	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Durable Type III - Blue Marking Paint TM2142	5/14/2016

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Durable Type III - Green Marking Paint TM2143	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Durable Type III - Red Marking Paint TM2141	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Type I/II - Black Marking Paint TM2221	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Type I/II - Blue Marking Paint TM2224	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Type I/II - Green Marking Paint TM2226	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Type I/II - Red Marking Paint TM2222	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Type I/II - Yellow Marking Paint TM2153	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Type I/II w Algaecide, Fungicide, & Rust Inhibitor - Black Marking Paint TM2543	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Type III w Algaecide, Fungicide, & Rust Inhibitor - Blue Marking Paint TM2545	5/14/2016

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne Type III w Algaecide, Fungicide, & Rust Inhibitor - Yellow Marking Paint TM2565	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Hotline Waterborne, Type I/II - White Marking Paint TM2248	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Type III w Algaecide & Rust Inhibitor - Black Marking Paint TM2540	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Type III w Algaecide, Fungicide & Rust Inhibitor - White Marking Paint TM2538	5/14/2016
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952, Type III w Algaecide, Fungicide, & Rust Inhibitor - Yellow Marking Paint TM2539	5/14/2016
Type III Equipment/Building	Boshchung America, LLC	Airport Winter Safety and Operations, RWIS	1/2/2016
Type III Equipment/Building	Astronics DME Corporation	L-804 Holding Position Edge Light	8/4/2015
Type III Equipment/Building	ADB Safegate	L-806 LED, Wind Cones-Frangible	5/15/2015
Type III Equipment/Building	ADB Safegate	L-806 Wind Cones - Frangible	5/15/2015
Type III Equipment/Building	ADB Safegate	L-850 D, Incandescent Inpavement Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-850 E, Incandescent Inpavement Lights	5/15/2015

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-850 F, Incandescent Inpavement Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-861 E, LED Runway Edge, Medium Intensity Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-861 LED, Medium Intensity Runway Edge Lights	5/15/2015
Type III Equipment/Building	ADB Safegate	L-804 LED, Holding Position Edge Light	5/5/2015
Type III Equipment/Building	ADB Safegate	L-810 LED, Obstruction Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-849 C, LED, Runway End Identification Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-849 E, LED, Runway End Identification Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 A, Q/I, Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 B, Q/I Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 C LED, Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 C, Q/I Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-850 D, LED Runway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 A, LED, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 A, Q, Taxiway, Inpavement Lights	5/5/2015

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-852 B, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 B, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 C, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 C, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 D, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 D, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 E, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 G, LED, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 G, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 J, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 S, Q, Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-852 T, LED Taxiway, Inpavement Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-858, LED, Runway and Taxiway Signs	5/5/2015
Type III Equipment/Building	ADB Safegate	L-861 SE, Q, Runway Edge, Medium Intensity Lights	5/5/2015

Type III Equipment/Building

ADB Safegate

L-861 T, LED Taxiway Edge, Medium
Intensity Lights

5/5/2015

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-861, Q, Runway Edge, Medium Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-861E, Q, Runway Edge, Medium Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-862 E, Q, Runway Edge, High Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-862, Q, Runway Edge, High Intensity Lights	5/5/2015
Type III Equipment/Building	ADB Safegate	L-880 LED, Precision Approach Path Indicator	5/5/2015
Type III Equipment/Building	ADB Safegate	L-881 LED, Abbreviated Precision Approach Path Indicator	5/5/2015
Type III Equipment/Building	Atg Airports, Ltd.	L-850 B Runway Inpavement Lights	2/2/2015
Type III Equipment/Building	Atg Airports, Ltd.	L-850 A Runway Inpavement Lights	1/20/2015
Type III Equipment/Building	Atg Airports, Ltd.	L-850 C Runway Inpavement Lights	1/17/2015
Type III Equipment/Building	Astronics DME Corporation	L-849 A LED Runway End Identification Lights	10/27/2014
Type III Equipment/Building	Rheinmetall Defence	DEBRA FOD	10/21/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B Black Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B Blue Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B Red Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B White Runway Marking Paint	8/16/2014

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Ennis-Flint Company	A-A-2886B Yellow Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Black Type I/II Fast Dry Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Black Type III Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Blue Type I/II Fast Dry Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Blue Type III Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Green Type I/II Fast Dry Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Green Type III Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Red Type I/II Fast Dry Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Red Type III Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E White Type I/II Fast Dry Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E White Type III Runway Marking Paint	8/16/2014
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Yellow Type I/II Fast Dry Runway Marking Paint	8/16/2014

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Ennis-Flint Company	TT-P-1952E Yellow Type III Runway Marking Paint	8/16/2014
Type III Equipment/Building	Manairco	L-861 T LED Runway & Taxiway Edge, Medium Intensity Lights	6/27/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-850 A LED Runway Inpavement Lights	6/16/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-850 B LED Runway Inpavement Lights	6/16/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 10 - 10,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 10 - 12,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 10 - 15,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 10 - 2,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 10 - 20,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 10 - 25,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 10 - 30,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 10 - 35,000 Gallon DWT Fuel Storage Tank	5/13/2014

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Containment Solutions	CSI Tank 4 - 1,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 4 - 600 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 6 - 4,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 6 - 2,500 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 6 - 3,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 6 - 5,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 6 - 6,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 8 - 12,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 8 - 8,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 8 - 15,000 Gallon Tank DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Containment Solutions	CSI Tank 8 - 5,000 Gallon DWT Fuel Storage Tank	5/13/2014
Type III Equipment/Building	Service Wire Company	L-824, Underground Electrical Cables for Airfield Circuits	5/4/2014

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Airport Lighting Company	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	3/29/2014
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Black Runway Marking Paint (5385)	3/24/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 A LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 B LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 C LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 D LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 J LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Eaton Crouse-Hinds	L-852 K LED Taxiway Inpavement Lights	2/25/2014
Type III Equipment/Building	Astronics DME Corporation	L-852 B LED Taxiway, Inpavement Lights	11/16/2013
Type III Equipment/Building	Astronics DME Corporation	L-852 C LED Taxiway, Inpavement Lights	11/16/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 E LED Runway & Taxiway Edge, Medium Intensity Lights	11/16/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 SE LED Runway & Taxiway Edge, Medium Intensity Lights	11/16/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Black Runway Marking Paint (5383)	10/19/2013

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Blue Runway Marking Paint (5274)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Blue Runway Marking Paint (5344)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Blue Runway Marking Paint (5384)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Green Runway Marking Paint (5376)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Green Runway Marking Paint (5386)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Red Runway Marking Paint (5345)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Red Runway Marking Paint (5375)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B White Runway Marking Paint (5281)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Yellow Runway Marking Paint (5342)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Yellow Runway Marking Paint (5372)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	A-A-2886B Yellow Runway Marking Paint (5382)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	IL SPEC Red Runway Marking Paint (5408)	10/19/2013

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Davies Imperial Coatings, Inc.	IL SPEC Yellow Runway Marking Paint (4636)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type II Blue Runway Marking Paint (4834)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type II Green Runway Marking Paint (5192)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type II Red Runway Marking Paint (4836)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type II Yellow Runway Marking Paint (4477)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type II Yellow Runway Marking Paint (8511)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type II Yellow Runway Marking Paint (9511)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type III Blue Runway Marking Paint (5433)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type III Green Runway Marking Paint (5435)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type III Red Runway Marking Paint (5434)	10/19/2013
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952E Type III Yellow Runway Marking Paint (5431)	10/19/2013
Type III Equipment/Building	Airport Lighting Company	L-804, Holding Position Edge Light	9/21/2013
Type III Equipment/Building	Honeywell Airport Systems	L-828 F20 Constant Current Regulator	9/21/2013

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Honeywell Airport Systems	L-828 W10 Constant Current Regulator	9/21/2013
Type III Equipment/Building	Honeywell Airport Systems	L-829 S04 Constant Current Regulator with Monitor	9/21/2013
Type III Equipment/Building	Honeywell Airport Systems	L-829-F04, Constant Current Regulator	9/9/2013
Type III Equipment/Building	Honeywell Airport Systems	L-829-F30, Constant Current Regulator	9/9/2013
Type III Equipment/Building	Honeywell Airport Systems	L-829-F70, Constant Current Regulator	9/9/2013
Type III Equipment/Building	Honeywell Airport Systems	L-829-S30, Constant Current Regulator	9/9/2013
Type III Equipment/Building	Honeywell Airport Systems	L-829-S70, Constant Current Regulator	9/9/2013
Type III Equipment/Building	Amerace - Thomas & Betts Corporation	L-830-16 Isolation Transformer, 60Hz, 10/15 Watts, 6.6/6.6 Amperes	7/9/2013
Type III Equipment/Building	Amerace - Thomas & Betts Corporation	L-830-17 Isolation Transformer, 60Hz, 20/25 Watts, 6.6A/6.6A Amperes	7/9/2013
Type III Equipment/Building	Astronics DME Corporation	L-852 D LED Taxiway, Inpavement Lights	7/7/2013
Type III Equipment/Building	Astronics DME Corporation	L-852 A LED Taxiway, Inpavement Lights	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 E Halogen Edge Light	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 Halogen Lights	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 T - Halogen Taxiway Light	3/26/2013
Type III Equipment/Building	Astronics DME Corporation	L-861 T LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Point Light Corporation	L-861 E LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Point Light Corporation	L-861 SE LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Point Light Corporation	L-861 T LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Point Light Corporation	L-862 E LED Runway & Taxiway Edge, Medium Intensity Lights	3/26/2013
Type III Equipment/Building	Advanced Drainage Systems (ADS)	D-705 10" Pipe Underdrain w/sock	3/10/2013
Type III Equipment/Building	Advanced Drainage Systems (ADS)	D-705 4" Pipe Underdrain w/sock	3/10/2013
Type III Equipment/Building	Advanced Drainage Systems (ADS)	D-705 6" Pipe Underdrain w/sock	3/10/2013
Type III Equipment/Building	Advanced Drainage Systems (ADS)	D-705 8" Pipe Underdrain w/sock	3/10/2013
Type III Equipment/Building	DME (Astronics)	L-852T-L-X LED, Inpavement, OMNI	3/9/2013
Type III Equipment/Building	Vaisala	AWOS A	1/6/2013
Type III Equipment/Building	Vaisala	AWOS A/V	1/6/2013
Type III Equipment/Building	Vaisala	AWOS I	1/6/2013
Type III Equipment/Building	Vaisala	AWOS II	1/6/2013
Type III Equipment/Building	Vaisala	AWOS III, III-T, III-P, III-PT, III-PTZ	1/6/2013
Type III Equipment/Building	Kodiack America, LLC	Snow Blower & Runway Broom Equipment	10/10/2012
Type III Equipment/Building	ADB Safegate	L-830, Isolation Transformer, 60Hz	7/28/2012
Type III Equipment/Building	TREX Aviation Systems	FOD Finder XM-Mobile	5/25/2012
Type III Equipment/Building	Stratech Systems Limited	iFerret TM FOD System	5/5/2012

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	ADB Safegate	L-849 A, LED Runway End Identification Lights	5/4/2012
Type III Equipment/Building	ADB Safegate	L-850 A, LED Runway Inpavement Lights	5/4/2012
Type III Equipment/Building	ADB Safegate	L-850 B, LED Runway Inpavement Lights	5/4/2012
Type III Equipment/Building	ADB Safegate	L-852 K, LED Taxiway Inpavement Lights	5/4/2012
Type III Equipment/Building	ADB Safegate	L-852 S, LED Taxiway Inpavement Lights	5/4/2012
Type III Equipment/Building	Vaisala	Inpavement Runway Sensors	5/4/2012
Type III Equipment/Building	Precision Control Systems	L-890, Lighting Control & Monitoring System	4/3/2012
Type III Equipment/Building	All Weather, Inc.	AWOS I - 900 Series	11/27/2011
Type III Equipment/Building	All Weather, Inc.	AWOS II - 900 Series	11/27/2011
Type III Equipment/Building	All Weather, Inc.	AWOS III - 3000 Series	11/27/2011
Type III Equipment/Building	All Weather, Inc.	AWOS III - 900 Series	11/27/2011
Type III Equipment/Building	FlexStake, Inc.	L-853, Retro reflective Markers	9/11/2011
Type III Equipment/Building	QinetiQ	Tarsier FOD System	9/11/2011
Type III Equipment/Building	TREX Aviation Systems	FOD Finder XF -Fixed	9/11/2011
Type III Equipment/Building	X-Sight	FODetect Systems	7/26/2011
Type III Equipment/Building	Flash Technology	L-856, High Intensity Obstruction Lights	3/28/2011
Type III Equipment/Building	Flash Technology	L-864, Red Obstruction Lights	3/28/2011

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Sherwin Industries, Inc.	L-893, Lighted Visual Aid for Runway Closure	3/28/2011
Type III Equipment/Building	ADB Safegate	L-854, Radio Controls	2/1/2011
Type III Equipment/Building	ADB Safegate	L-860, Low Intensity Runway Edge Lights	2/1/2011
Type III Equipment/Building	Flight Light	L-810, Lights-Obstruction (Various Types)*	1/18/2011
Type III Equipment/Building	Flight Light	L-828, Constant Current Regulators (Various Types)*	1/18/2011
Type III Equipment/Building	Flight Light	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	1/18/2011
Type III Equipment/Building	Southwire Company	L-824, Underground Electrical Cables for Airfield Circuits	1/16/2011
Type III Equipment/Building	Nehring Electrical Works	L-824, Underground Electrical Cables for Airfield Circuits	11/23/2010
Type III Equipment/Building	Point Light Corporation	L-806, Wind Cones-Frangible	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-807, Wind Cones-Rigid	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-810, Lights-Obstruction	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-862, Runway Edge-Threshold-Stop Bar Lights	11/20/2010
Type III Equipment/Building	Point Light Corporation	L-864, Red Obstruction Lights	11/20/2010
Type III Equipment/Building	Amerace - Thomas & Betts Corporation	L-830-1, Isolation Transformer, 60Hz 30/45 Watts, 6.6/6.6A	9/19/2010

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Tenco Industries Inc.	202 LMM Snow Blower	8/27/2010
Type III Equipment/Building	Flash Technology	L-865, White Obstruction Lights	8/17/2010
Type III Equipment/Building	Rural Electric	L-854, Radio Controls	8/17/2010
Type III Equipment/Building	ADB Safegate	L-821, Airport Lighting Control Panel	8/7/2010
Type III Equipment/Building	Flash Technology	L-849, Runway End Identification Lights	6/21/2010
Type III Equipment/Building	Flash Technology	L-859, Flashing Omnidirectional Lights	6/21/2010
Type III Equipment/Building	Airport Lighting Company	L-880, Precision Approach Path Indicator	4/27/2010
Type III Equipment/Building	Airport Lighting Company	L-881, Abbreviated Precision Approach Path Indicator	4/27/2010
Type III Equipment/Building	Neubert Aero Corp	Dynamic Friction Decelerometer	4/27/2010
Type III Equipment/Building	Neubert Aero Corp	Dynamic Friction Tester	4/27/2010
Type III Equipment/Building	Rural Electric	L-821, Airport Lighting Control Panel	4/27/2010
Type III Equipment/Building	Rural Electric	L-890, Lighting Control & Monitoring System	4/27/2010
Type III Equipment/Building	Safe-Hit	L-853, Retroreflective Markers	3/20/2010
Type III Equipment/Building	Daimler	Freightliner M2 Carrier Vehicle	1/12/2010
Type III Equipment/Building	Millard Towers Limited	L-891 - Low Impact Resistant Structures	12/22/2009
Type III Equipment/Building	Millard Towers Limited	L-892 - Frangible Support Structure	12/22/2009
Type II - Insufficient Quantity and/or Quality	OCEM	L-852 S LED Taxiway Inpavement Lights	12/1/2009
Type III Equipment/Building	Prysmian Cables and Systems, Inc.	L-824, Underground Electrical Cables for Airfield Circuits	10/4/2009

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Airport Lighting Company	L-861 Runway & Taxiway Edge, Medium Intensity Lights	9/13/2009
Type III Equipment/Building	Airport Lighting Company	L-862, Runway Edge-Threshold-Stop Bar Lights	9/13/2009
Type III Equipment/Building	Strobe Approach Lighting Technology, LLC	L-849, Runway End Identification Lights	8/25/2009
Type III Equipment/Building	Strobe Approach Lighting Technology, LLC	L-859, Flashing Omnidirectional Lights	8/25/2009
Type III Equipment/Building	LoneStar	P-632, Bituminous Pavement Rejuvenator	8/17/2009
Type III Equipment/Building	Pavement Rejuvenation International, LP	P-632, Bituminous Pavement Rejuvenator	8/16/2009
Type III Equipment/Building	Soundproof Windows	Single Hung 36 X 72 Window	8/14/2009
Type III Equipment/Building	ADB Safegate	L-828, Constant Current Regulators	7/28/2009
Type III Equipment/Building	ADB Safegate	L-829, Monitored Constant Current Regulators	7/28/2009
Type III Equipment/Building	ADB Safegate	L-890, Lighting Control & Monitoring System	7/28/2009
Type III Equipment/Building	Airfield Guidance Sign Manufacturers, Inc.	L-858, Runway & Taxiway Signs	7/28/2009
Type III Equipment/Building	Rural Electric	L-867, Non-Load Bearing Light Box	7/24/2009
Type III Equipment/Building	Rural Electric	L-868, Load Bearing Light Box	7/24/2009
Type III Equipment/Building	ADB Safegate	L-890, Lighting Control & Monitoring System	7/20/2009
Type III Equipment/Building	Olson Industries	L-867, Non-Load Bearing Light Box	7/19/2009

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Olson Industries	L-868, Load Bearing Light Box	7/19/2009
Type III Equipment/Building	Standard Signs, Inc.	L-858, Runway & Taxiway Signs	7/10/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-890, Lighting Control & Monitoring System	6/30/2009
Type III Equipment/Building	Airport Lighting Equipment	L-867, Non-Load Bearing Light Box	6/29/2009
Type III Equipment/Building	Airport Lighting Equipment	L-868, Load Bearing Light Box	6/29/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-801, Beacons-Medium Intensity	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-802, Beacons-High Intensity	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-804 Holding Position Edge Light	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-806, Wind Cones-Frangible	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-807, Wind Cones-Rigid	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-823, Primary Connector Kits	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-828, Constant Current Regulators	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-829, Regulators, Constant Current with Monitor	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-830, Isolation Transformers, 60Hz	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-847, Circuit Selector Switch	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-852, Taxiway Inpavement Lights	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-858, Runway & Taxiway Signs	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-862, Runway Edge-Threshold-Stop Bar Lights	6/28/2009

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Eaton Crouse-Hinds	L-880, Precision Approach Path Indicator	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-881, Abbreviated Precision Approach Path Indicator	6/28/2009
Type III Equipment/Building	Eaton Crouse-Hinds	L-884, Power & Control Unit	6/28/2009
Type III Equipment/Building	ADB Safegate	L-804, Holding Position Edge Light	6/26/2009
Type III Equipment/Building	ADB Safegate	L-807, Wind Cones-Rigid	6/26/2009
Type III Equipment/Building	ADB Safegate	L-810, Lights-Obstruction	6/26/2009
Type III Equipment/Building	ADB Safegate	L-827, Monitors-Regulator	6/26/2009
Type III Equipment/Building	ADB Safegate	L-828, Constant Current Regulators	6/26/2009
Type III Equipment/Building	ADB Safegate	L-829, Monitored Constant Current Regulators	6/26/2009
Type III Equipment/Building	ADB Safegate	L-847, Circuit Selector Switch	6/26/2009
Type III Equipment/Building	ADB Safegate	L-853, Retroreflective Markers	6/26/2009
Type III Equipment/Building	ADB Safegate	L-858, Runway & Taxiway Signs	6/26/2009
Type III Equipment/Building	ADB Safegate	L-861 Runway & Taxiway Edge, Medium Intensity Lights	6/26/2009
Type III Equipment/Building	ADB Safegate	L-862, Runway Edge-Threshold-Stop Bar Lights	6/26/2009
Type III Equipment/Building	ADB Safegate	L-880, Precision Approach Path Indicator	6/26/2009
Type III Equipment/Building	ADB Safegate	L-881, Abbreviated Precision Approach Path Indicator	6/26/2009
Type III Equipment/Building	ADB Safegate	L-884, Power & Control Unit	6/26/2009

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Halibrite	L-801, Beacons-Medium Intensity	6/23/2009
Type III Equipment/Building	Halibrite	L-802, Beacons-High Intensity	6/23/2009
Type III Equipment/Building	Halibrite	L-806, Wind Cones-Frangible	6/23/2009
Type III Equipment/Building	Halibrite	L-807, Wind Cones-Rigid	6/23/2009
Type III Equipment/Building	Halibrite	L-893, Lighted Visual Aid for Runway Closure	6/23/2009
Type III Equipment/Building	Manairco	L-801, Beacons-Medium Intensity	6/23/2009
Type III Equipment/Building	Manairco	L-828, Constant Current Regulators	6/23/2009
Type III Equipment/Building	Manairco	L-861 Runway & Taxiway Edge, Medium Intensity Lights	6/23/2009
Type III Equipment/Building	Multi-Electric	L-804, Holding Position Edge Light	6/23/2009
Type III Equipment/Building	Multi-Electric	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	6/23/2009
Type III Equipment/Building	Multi-Electric	L-862, Runway Edge-Threshold-Stop Bar Lights	6/23/2009
Type III Equipment/Building	Multi-Electric	L-880, Precision Approach Path Indicator	6/23/2009
Type III Equipment/Building	Multi-Electric	L-881, Abbreviated Precision Approach Path Indicator	6/23/2009
Type III Equipment/Building	DME	L-861 LED Runway & Taxiway Edge, Medium Intensity Lights	6/21/2009
Type III Equipment/Building	DME	L-862, Runway Edge-Threshold-Stop Bar Lights	6/21/2009
Type III Equipment/Building	Integro	L-830, Isolation Transformers, 60Hz	6/21/2009

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 10/7/2022)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Manufacturer	Product	Effective Date
Type III Equipment/Building	Jaquith Industries	L-867, Non-Load Bearing Light Box	6/21/2009
Type III Equipment/Building	Jaquith Industries	L-868, Load Bearing Light Box	6/21/2009
Type III Equipment/Building	Jaquith Industries	L-891 - Low Impact Resistant Structures	6/21/2009
Type III Equipment/Building	Jaquith Industries	L-892 - Frangible Support Structure	6/21/2009

The following components or subcomponents are steel or manufactured goods that have an FAA specification number and have been determined to be 1) 100% United States product and 2) produced in the United States.

Waiver Type	Manufacturer	Product	Effective Date
100% US and US Final Assembly	Integro	L-823 Plug and Receptacle, Cable Connectors	6/10/2009
100% US and US Final Assembly	MCB Industries	EB-83 bolts	1/31/2011
100% US and US Final Assembly	MCB Industries	2-part washers (used with 3/8" x 16 by various length bolts)	10/14/2015
100% US and US Final Assembly	MCB Industries	18-8 fasteners (various length bolts)	12/27/2016

GENERAL CIVIL RIGHTS PROVISIONS

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

CIVIL RIGHTS – TITLE VI ASSURANCES

Title VI Solicitation Notice

The State of Hawaii – Airports Division, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Title VI Clauses for Compliance with Nondiscrimination Requirements

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”), agrees as follows:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor’s obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a Contractor’s noncompliance with the non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or

- b. Cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §§ 12131 – 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority

populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 et seq).

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT REQUIREMENTS

1. Overtime Requirements.

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

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

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

3. Withholding for Unpaid Wages and Liquidated Damages.

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

4. Subcontractors.

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

DAVIS-BACON REQUIREMENTS

1. Minimum Wages.

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

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

- (B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

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

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

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

2. Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

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

Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and that show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

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

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

- (1) The payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5(a)(3)(i), and that such information is correct and complete;
- (2) Each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;
- (3) Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

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

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

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

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the

Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

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

5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

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

9. Disputes Concerning Labor Standards.

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

10. Certification of Eligibility.

- (i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC 1001.

COPELAND “ANTI-KICKBACK” ACT

Contractor must comply with the requirements of the Copeland “Anti-Kickback” Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

ENERGY CONSERVATION REQUIREMENTS

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201*et seq.*).

PROCUREMENT OF RECOVERED MATERIALS

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

1. The contract requires procurement of \$10,000 or more of a designated item during the fiscal year;
or
2. The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

RIGHTS TO INVENTIONS

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

VETERAN'S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

DISTRACTED DRIVING

In accordance with Executive Order 13513, “Federal Leadership on Reducing Text Messaging While Driving”, (10/1/2009) and DOT Order 3902.10, “Text Messaging While Driving”, (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION

PART 0.F – DBE FORMS



Disadvantaged Business Enterprise (DBE) Contract Goal Verification and Good Faith Efforts (GFE) Documentation For Construction

Project #:	County:
DBE Project Goal:	Prime Contractor:

As required by the specifications “*Disadvantaged Business Enterprise Requirements*,” the dollar amount of each subcontract (both DBE and non-DBE firms) for all subcontractors, manufacturers, suppliers, and trucking companies is due by the close of business, 4:30 P.M. Hawaii Standard Time (HST) five (5) days after bid opening. **Failure to provide required information sufficient to evaluate the bid/proposal shall be cause for bid/proposal rejection.**

Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items, and allowance items. This DBE contract goal is applicable to all the contract work performed for this project and is calculated as follows:

1. DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).
2. The Department shall adjust the bidder’s/offeror’s DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

Name of Subcontractor, Supplier, Manufacturer, and Trucking Company	DBE (Y/N)	Bid Item Number and Description	Approx. Quantity/Hours	Unit	Unit Price/Rate	Dollar Amount

A. Dollar amount of the work to be performed by DBE subcontractors, manufacturers, and trucking companies, plus 60% of the dollar amount of DBE suppliers	
B. Sum of all work items less mobilization, force account items, allowance items	
A/B = DBE contract goal	

NAME and SIGNATURE of AUTHORIZED REPRESENTATIVE of PRIME CONTRACTOR: _____ DATE: _____

Summary of Good Faith Efforts (GFE)

As required by the specifications “*Disadvantaged Business Enterprise Requirements*,” documentation of GFE shall be submitted by the close of business, 4:30 P.M. HST five (5) days of bid opening. **The bidder/offeror shall respond to the following questions and describe efforts to obtain DBE participation whether or not the DBE project goal is met.** Responses must be sufficient to properly evaluate the bidder’s/offeror’s good faith efforts. Copies of correspondence return receipts, telephone logs, or other documentation will be required to support GFE. Attach additional sheets, if necessary. Based on responses given, HDOT shall make a determination of the bidders’ GFE. **Failure to provide required information sufficient to evaluate the bid/proposal shall be cause for bid/proposal rejection.**

1. Did you submit the required information by the close of business, 4:30 P.M. HST, five (5) days after bid opening (i.e. DBE name, address, NAICS code, description of work, project name, and number)?
2. Explain your GFE if any, to solicit through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform part or all of the work to be included under the contract.
 - a. Explain your GFE if any, to solicit the participation of potential DBEs as early in the procurement process as practicable.
 - b. Explain your GFE if any, to allow sufficient time for the DBEs to properly inquire about the project and respond to the solicitation.
 - c. Explain your GFE if any, to take appropriate steps to follow up with interested DBEs in a timely manner to facilitate participation by DBEs in this project.
3. Explain your GFE if any, to identify and break up portions of work that can be performed by DBEs in order to increase the likelihood that a DBE will be able to participate, and that the DBE goal could be achieved (e.g. breaking out contract items into economically feasible units to facilitate DBE participation even when you might otherwise prefer to self-perform these work items).
4. Explain your GFE if any, to make available or provide interested DBEs with adequate information about the plans, specifications, and requirements of the project in a timely manner, and assist them in responding to your solicitation.
5. Explain your GFE if any, to negotiate in good faith with interested DBEs. Evidence of such negotiations includes documenting:
 - a) the names, addresses and telephone numbers of DBEs that were contacted; b) a description of the information that was provided to DBEs regarding the plans and specifications; and c) detailed explanation for not utilizing individual DBEs on the project.
6. Did you solely rely on price in determining whether to use a DBE? If yes please explain. The fact that there may be additional or higher costs associated with finding and utilizing DBEs are not, by themselves, sufficient reasons for your refusal to utilize a DBE or

NAME and SIGNATURE of AUTHORIZED REPRESENTATIVE of PRIME CONTRACTOR:

DATE:

failure to meet the DBE goal, provided that such additional costs are not unreasonable. Also, the ability or desire to perform a portion of the work with your own forces, that could have been undertaken by an available DBE, does not relieve you of the responsibility to make good faith efforts to meet the DBE goal, and to make available and solicit DBE participation in other areas of the project to meet the DBE goal.

7. Did you reject DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities? If yes, please explain. The DBEs standing within the industry, membership in specific groups, organizations or associates, and political or social affiliation are not legitimate basis for the rejection or non-solicitation of bids from particular DBEs.
8. Explain your GFE to assist interested DBEs in obtaining bonding, lines of credit, or insurance.
9. Explain your GFE if any, to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services.
10. If you selected a non-DBE over a DBE subcontractor, please provide the quotes of each DBE and non-DBE subcontractor submitted to you for work on the contract; and for each DBE that was contacted but not utilized for a contract, provide a detailed written explanation for each DBE detailing the reasons for not utilizing or allowing the DBE to participate in the contract.
11. Explain your GFE if any, to effectively use the services of available minority/women community organizations, minority/women business groups, contractors' groups, and local, state and federal minority/women business assistance offices or other organizations to provide assistance in recruitment and placement of DBEs.

NAME and SIGNATURE of AUTHORIZED REPRESENTATIVE of PRIME CONTRACTOR:

DATE:



**Disadvantaged Business Enterprise (DBE)
Contract Goal Verification and Good Faith Efforts (GFE)
Documentation For Construction
INSTRUCTIONS**

Project #	Self-explanatory
County	County where project is located
DBE Project Goal	Indicate DBE goal listed in the proposal on P-1
Prime Contractor	Name of prime contractor
Name of Subcontractor, Supplier, Manufacturer, and Trucking Company	Company name of subcontractor, supplier, manufacturer, or trucking firm
DBE (Y/N)	Y for yes and N for no
Bid Item Number and Description	Pay item and description
Approx. Quantity/ Hours	Self-explanatory
Unit	Unit of measure
Unit Price/ Rate	Self-explanatory
Dollar Amount	Total dollar amount committed to subcontractor, supplier, manufacturer, or trucking firm
A. Dollar amount of the work to be performed by DBE subcontractors, manufacturers, and trucking companies, plus 60% of the dollar amount of DBE suppliers	Total amount of DBE participation
B. Sum of all work items less mobilization, force account items, allowance items	List total of work items minus mobilization, force accounts and allowances. DBE credit shall not be given for mobilization, force account items, and allowance items.
A/B = DBE contract goal	Self-explanatory
Name and Signature of Authorized Representative of Prime Contractor	Self-explanatory (Note: bidder must sign and date every page of form.)
Date	Date form is signed
Summary of Good Faith Efforts (GFE)	Complete by answering questions in detail and providing documentation to support how bidder demonstrated good faith efforts to meet the goal, irrespective of whether or not the goal was met.



Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Trucking Company

This commitment is subject to the award and receipt of a signed contract from the Hawaii Department of Transportation (HDOT) for the subject project. DBEs must be certified by the bid opening date.

Project #:	County:
NAICS CODE/DESCRIPTION OF WORK:	SECONDARY NAICS CODE:

*All quantities and units should match the bid tab item whenever possible.

The prime contractor shall inform HDOT the dates when the trucking firm starts and completes all work under the subcontract.

Estimated Beginning Date (Month/Year):	Estimated Completion Date (Month/Year):
-----------------------------------------------	------------------------------------------------

TRUCKING COMPANY:	Item No.	Item Description	Unit	Unit Price/Rate	Amount
				\$	\$
				\$	\$
				\$	\$
TOTAL COMMITMENT AMOUNT					\$

1. Number of hours contracted or quantities to be hauled: _____
2. Number of fully operational trucks to be used: _____ Tractor/trailers: _____ Dump trucks: _____
3. Number of fully operational trucks owned by DBE: _____ Dump trucks: _____ Tractors/trailers: _____
4. If Owner Operators or additional trucking companies are to be used answer the following:

Name of Trucking Company	DBE Y/N	Estimated Dollar Amount to be Contracted	Number and Type of Trucks (specify)
		\$	
		\$	

The prime contractor certifies by signature on this agreement to utilize the DBE trucking company as listed on the agreement form. If a DBE trucking company is unable to perform the work as listed on this agreement form, the prime contractor will follow the substitution/replacement approval process as outlined in the contract DBE requirements. **IMPORTANT! The signatures of the DBE, prime contractor, and subcontractor (only if the DBE will be a second tier sub) confirms that all information on this Agreement is true and correct. Parties should sign Agreement in the order in which they are listed.**

DBE NAME:	Name/Title (please print):
Address:	Signature:
Phone: Fax:	Date:
Email:	Name/Title (please print):
Prime Contractor:	Signature:
Address:	Date:
Phone: Fax:	Name/Title (please print):
Email:	Signature:
Subcontractor (only if the DBE will be a second tier sub):	Date:
Address:	Signature:
Phone: Fax:	Date:
Email:	Date:

HDOT retains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you.



Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Trucking Company

INSTRUCTIONS

The purpose of this agreement is to secure the commitment of the bidder/offeror to utilize the listed DBE trucking company, and the DBE's confirmation that it will perform work for the bidder/offeror on this project. The information on this form shall be provided by the DBE.

Project #	Self-explanatory
County	County where project is located
NAICS Code/Description of Work	Primary North American Industry Classification System code under which DBE is certified to perform and description of work to be done
Secondary NAICS Code	List other NAICS codes firm is certified to perform
Estimated Beginning Date (Month/Year)	Date DBE shall begin work on the project
Estimated Completion Date (Month/Year)	Date DBE's work will be completed
Trucking Company	Name of DBE trucking company
Item No.	List pay item number
Item Description	Description of item
Unit	Unit of measure – e.g. weight or hours
Unit Price/Rate	Cost per unit or hourly rate
Amount	Total amount per pay item
Total Commitment Amount	Sum of all pay items and total commitment of bidder/offeror to DBE
Number of hours contracted or quantities to be hauled	Approximate number of hours or tonnage to be hauled
Number of fully operational trucks to be used:	Total number of trucks to be used for the project
Tractor/Trailers	Number of tractor trailers to be used
Dump Trucks	Number of dump trucks to be used
Number of fully operational trucks owned by DBE	Number of listed DBE's trucks to be used on this project
Name of Trucking Company	If other trucking companies (DBE or non-DBE) are to be leased, list name and information about type of trucks in this section
Estimated Dollar Amount to be Contracted	Provide information about estimated cost to lease trucks
Number of Dump Trucks, Tractor/Trailer	Self-explanatory
DBE NAME	DBE Company name
Name/Title	Name and title of DBE's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of DBE's representative
Date	Date agreement is signed
Prime Contractor	Company name

Name/Title	Name and title of prime contractor's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of prime contractor's representative
Date	Date agreement is signed
Subcontractor (only if the DBE will be a second tier sub):	Name of subcontractor only if the listed DBE trucking company will be performing work under this subcontractor
Name/Title	Name and title of the subcontractor's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of subcontractor
Date	Date agreement is signed



Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Subcontractor, Manufacturer, or Supplier

This commitment is subject to the award and receipt of a signed contract from the Hawaii Department of Transportation (HDOT) for the subject project. DBEs must be certified by the bid opening date.

Project #:	County:
NAICS CODE/DESCRIPTION OF WORK:	SECONDARY NAICS CODE:

*All quantities and units should match the bid tab item whenever possible.

The prime contractor shall inform HDOT of the dates when the subcontractor starts and completes all work under the subcontract.

Estimated Beginning Date (Month/Year):	Estimated Completion Date (Month/Year):
-----------------------------------------------	------------------------------------------------

SUBCONTRACTOR:	Item No.	Item	Approx. Quantity	Unit	Unit Price	Amount
					\$	\$
					\$	\$
					\$	\$
					\$	\$
TOTAL COMMITMENT AMOUNT						\$

MANUFACTURER:	Item No.	Item	Approx. Quantity	Unit	Unit Price	Amount
					\$	\$
					\$	\$
TOTAL COMMITMENT AMOUNT						\$

SUPPLIER:	Item No.	Item	Approx. Quantity	Unit	Unit Price	Amount
					\$	\$
					\$	\$
TOTAL COMMITMENT AMOUNT						\$

The prime contractor certifies by signature on this agreement that subcontracts will be executed between the prime contractor and the DBE subcontractors as listed on the agreement form. If a DBE subcontractor is unable to perform the work as listed on this agreement form, the prime contractor will follow the substitution/replacement approval process as outlined in the contract DBE requirements. **IMPORTANT! The signatures of the DBE, prime contractor, and subcontractor (only if the DBE will be a second tier sub) confirms that all information on this Agreement is true and correct. Parties should sign Agreement in the order in which they are listed.**

DBE NAME:	Name/Title (please print):
Address:	Signature:
Phone: Fax:	Date:
Email:	Name/Title (please print):
Prime Contractor:	Signature:
Address:	Date:
Phone: Fax:	Name/Title (please print):
Email:	Signature:
Subcontractor (only if the DBE will be a second tier sub):	Date:
Address:	Signature:
Phone: Fax:	Date:
Email:	Date:

HDOT retains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you.



Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Subcontractor, Manufacturer, or Supplier INSTRUCTIONS

The purpose of this agreement is to secure the commitment of the bidder/offeror to utilize the listed DBE, and the DBE's confirmation that it will perform work for the bidder/offeror on this project. The information on this form shall be provided by the DBE.

Project #	Self-explanatory
County	County where project is located
NAICS Code/Description of Work	Primary North American Industry Classification System code under which DBE is certified to perform and description of work to be done
Secondary NAICS Code	List other NAICS codes firm is certified to perform
Estimated Beginning Date (Month/Year)	Date DBE shall begin work on the project
Estimated Completion Date (Month/Year)	Date DBE's work will be completed
Subcontractor	Name of DBE subcontractor (company name)
Item No.	List pay item number
Item	Description of item
Approx. Quantity	Self-explanatory
Unit	List unit of measure
Unit Price	Cost per unit
Amount	Total amount per pay item
Total Commitment Amount	Sum of all pay items and total commitment of bidder/offeror to DBE
Manufacturer	Name of DBE manufacturer
Supplier	Name of DBE supplier (aka regular dealer)
DBE NAME	DBE Company name
Name/Title	Name and title of DBE's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of DBE's representative
Date	Date agreement is signed
Prime Contractor	Company name
Name/Title	Name and title of prime contractor's representative
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of prime contractor's representative
Date	Date agreement is signed
Subcontractor (only if the DBE will be a second tier sub):	Name of subcontractor only if the listed DBE will be performing work under this subcontractor as a second tier subcontractor/supplier/manufacturer

Name/Title	Name and title of the subcontractor's representative that the listed DBE will work under as a second tier subcontractor/supplier/manufacturer
Address	Self-explanatory
Phone	Self-explanatory
Fax	Self-explanatory
Email	Self-explanatory
Signature	Signature of subcontractor's representative
Date	Date agreement is signed

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION

PART 0.G – SAMPLE FORMS

C O N T R A C T

THIS AGREEMENT, made this day _____, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as "STATE", and «CONTRACTOR», «STATE_OF_INCORPORATON», whose business/post office address is «ADDRESS» hereinafter referred to as "CONTRACTOR",

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to complete in place, furnish and pay for all labor and materials necessary for

“«PROJECT_NAME_AND_NO»”,

or such a part thereof as shall be required by the STATE, the total amount of which labor, materials and construction shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»----- DOLLARS

(\$«BASIC_NUMERIC») as follows:

TOTAL AMOUNT FOR COMPARISON OF BIDS.....\$«BASIC_NUMERIC»

which shall be provided from the following funds:

Federal Funds.....
State Funds.....
TOTAL AMOUNT.....

all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans for «PROJECT NO ONLY», and any supplements thereto, on file in the office of the Director of Transportation. These documents, together with all alterations, amendments, and additions thereto and deductions therefrom, are attached hereto or incorporated herein by reference and made a part of this contract.

The CONTRACTOR hereby covenants and agrees to complete such construction within «WORKING DAYS», from the date indicated in the notice to proceed from the STATE, subject, however, to such extensions as may be provided for under the specifications.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»-----DOLLARS (\$«BASIC NUMERIC») in lawful money, but not more than such part of the same as is actually earned according to the STATE's determination of the actual quantities of work performed and materials furnished by the CONTRACTOR at the unit or lump sum prices set forth in the attached proposal schedule. Such payment, including any extras, shall be made, subject to such additions or deductions hereto or hereafter made in the manner and at the time prescribed in the specifications and this contract.

An additional sum of «EXTRAS»-----DOLLARS (\$«EXTRA NUMERIC») is hereby provided for extra work and shall be provided from the following funds:

Federal Funds.....
State Funds.....
Total.....

Where Federal funds are involved, it is covenanted and agreed by and between the parties hereto that the sum of ----«FEDERAL_BASIC»----DOLLARS (\$«FEDERAL_BASIC_NUMERIC») and ----«FEDERAL_EXTRAS»----DOLLARS (\$«FEDERAL_EXTRAS_NUMERIC»), a portion of the contract price and extras, respectively, shall be paid out of the applicable Federal funds, and that this contract shall be construed to be an agreement to pay said sums to the Contractor only out of the aforesaid Federal funds if and when such Federal funds shall be received from the Federal Government, and that this contract shall not be construed to be a general agreement to pay said portions at all events out of any funds other than those which may be so received from the Federal Government; provided, that if the Federal share of the cost of the project is not immediately forthcoming from the Federal Government, the STATE may advance the CONTRACTOR the anticipated Federal reimbursement of the cost of the completed portions of the work from funds which have been appropriated by the STATE for its pro rata share.

All words used herein in the singular shall extend to and include the plural. All words used in the plural shall extend to and include the singular. The use of any gender shall extend to and include all genders.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

STATE OF HAWAII

Director of Transportation

«CONTRACTOR»

Signature

Print name

Print Title

Date

PERFORMANCE BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a
surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligee, in the amount of _____

_____ DOLLARS (\$_____), to which payment Principal and Surety bind themselves,
their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by
these presents.

WHEREAS, the above-bound Principal has signed a Contract with Obligee on
_____, for the following project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part
hereof.

NOW THEREFORE, the condition of this obligation is such that:

If the Principal shall promptly and faithfully perform, and fully complete the Contract in
strict accordance with the terms of the Contract as said Contract may be modified or amended
from time to time; then this obligation shall be void; otherwise to remain in full force and effect.

Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

In the event of Default by the Principal, of the obligations under the Contract, then after written Notice of Default from the Obligees to the Surety and the Principal and subject to the limitation of the penal sum of this bond, Surety shall remedy the Default, or take over the work to be performed under the Contract and complete such work, or pay moneys to the Obligees in satisfaction of the surety's performance obligation on this bond.

Signed this _____ day of _____, _____.

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

***ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC**

PERFORMANCE BOND

KNOW TO ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto the

_____ *(State/County entity)*

its successors and assigns, as Obligee, hereinafter called Obligee, in the amount

_____ DOLLARS \$ _____),
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- Legal Tender;**
- Share Certificate** unconditionally assigned to or made payable at sight to _____
Description: _____;
- Certificate of Deposit**, No. _____, dated _____ issued by _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Cashier's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Teller's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Treasurer's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Official Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Certified Check** No. _____, dated _____ accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____ entered into a contract with Obligee for the following Project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The Condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, and shall deliver the Project to the Obligee, or to its successors or assigns, fully completed as in the Contract specified and free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder.

Signed and sealed this _____ day of _____, _____.

(Seal) _____

Name of Contractor

Signature*

Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____,
(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligees, in the amount of _____

_____ Dollars (\$ _____), to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal has signed Contract with the Obligees on _____ for the following project: _____

_____ hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to any Claimant, as hereinafter defined, for all labor and materials supplied to the Principal for use in the performance of the Contract, then this obligation shall be void; otherwise to remain in full force and effect.

1. Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

2. A "Claimant" shall be defined herein as any person who has furnished labor or materials to the Principal for the work provided in the Contract.

Every Claimant who has not been paid amounts due for labor and materials furnished for work provided in the Contract may institute an action against the Principal and its Surety on this bond at the time and in the manner prescribed in Section 103D-324, Hawaii Revised Statutes, and have the rights and claims adjudicated in the action, and judgment rendered thereon; subject to the Obligee's priority on this bond. If the full amount of the liability of the Surety on this bond is insufficient to pay the full amount of the claims, then after paying the full amount due the Obligee, the remainder shall be distributed pro rata among the claimants.

Signed this _____ day of _____, _____.

(Seal)

Name of Principal (Contractor)

*

Signature

Title

(Seal)

Name of Surety

*

Signature

Title

***ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC**

LABOR AND MATERIAL PAYMENT BOND

KNOW TO ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto _____
(State/County entity)

its successors and assigns, as Obligee, hereinafter called Obligee, in the amount
_____ DOLLARS (\$ _____)
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

- Legal Tender;
- Share Certificate unconditionally assigned to or made payable at sight to _____
Description: _____
- Certificate of Deposit, No. _____, dated _____ issued by _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Cashier's Check No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Teller's Check No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Treasurer's Check No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Official Check No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;
- Certified Check No. _____, dated _____ accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____ entered into a contract with Obligee for the following Project: _____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

AND IT IS HEREBY STIPULATED AND AGREED that this bond shall inure to the benefit of any and all persons entitled to file claims for labor performed or materials furnished in said work so as to give any and all such persons a right of action as contemplated by Sections 103D-324(d) and 103D-324(e), Hawaii Revised Statutes.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payments of mechanics' liens which may be filed of record against the Project, whether or not claim for the amount of such lien be presented under and against this bond..

Signed this _____ day of _____, _____.

(Seal) _____

Name of Contractor

Signature*

Title

ALL SIGNATURES MUST BE ACKNOWLEDGED BY A NOTARY PUBLIC

CHAPTER 104, HRS COMPLIANCE CERTIFICATE

The undersigned bidder does hereby certify to the following:

1. Individuals engaged in the performance of the contract on the job site shall be paid:

A. Not less than the wages that the director of labor and industrial relations shall have determined to be prevailing for corresponding classes of laborers and mechanics employed on public works projects; and

B. Overtime compensation at one and one-half times the basic hourly rate plus fringe benefits for hours worked on Saturday, Sunday, or a legal holiday of the State or in excess of eight hours on any other day.

2. All applicable laws of the federal and state governments relating to workers' compensation, unemployment compensation, payment of wages, and safety shall be fully complied with.

DATED at Honolulu, Hawaii, this _____ day of _____.

Name of Corporation, Partnership, or Individual

Signature and Title of Signer

Subscribed and sworn before me this
_____ day of _____.

Notary Public, _____ Judicial Circuit,
State of Hawaii
My Commission Expires: _____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HONOLULU, HAWAII

SPECIFICATIONS

PART I - GENERAL PROVISIONS FOR CONSTRUCTION PROJECTS

The Hawaii Department of Transportation AIR and WATER Transportation Facilities Division General Provisions for Construction Projects dated 2016 is not physically included in these specifications. The General Provisions are available at

<http://hidot.hawaii.gov/administration/con/>

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION

PART II – TECHNICAL PROVISIONS

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01000 - DESCRIPTION OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provision of the Contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this section.

1.02 SCOPE OF WORK

- A. The work involves replacement of the existing fire alarm initiation and notification appliance devices serving the Elliot Onizuka Kona International Airport including but not limited to the following:
 - 1. Demolition of the existing fire alarm appliances and associated devices for the hold rooms, ticket lobbies, baggage claims, building 344, existing immigrations tent and administrative buildings.
 - 2. Installation of new fire alarm initiation and notification appliance devices for the hold rooms, ticket lobbies, baggage claims, building 344, existing immigrations tent and administrative buildings.
 - 3. Connect new system to the existing fire alarm system provided under the terminal modernization work. A new panel for the old immigrations facility will be provided and networked via fiber to existing administrative module 2 panel.
 - 4. Provide additional annunciator compatible with JCI fire alarm system within ARFF (Aircraft Rescue and Firefighting). Provide network via fiber to module 2 panel.
- 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.

1.03 PERMITS

- A. The Contractor is responsible for any permits, if required, before starting the construction. DOTA anticipates that the following permits will be required for this project.

- 1) Hawaii County Building Permit.

If any of these permits are found to be unnecessary, the Contractor shall provide documentation from the appropriate permitting agency showing that the permit is not required for this project before any construction operations take place. The Contractor is responsible for the preparation and submittal of application document(s) to the appropriate permitting agency, payment of application fee(s), and all other work necessary to obtain all required permit(s) prior to starting construction operations at the project site. Construction operations shall not start until all required permits are approved by the appropriate permitting agencies and copies submitted to the Engineer for the record.

- B. Bidders are responsible for researching and confirming which permits are and are not necessary for this project. Bidders shall exercise due diligence in researching what permits, if any, are required beyond those mentioned in Part 1.03(A) above. If a permit beyond those mentioned in Part 1.03(A) above is found to be necessary for this project, then bidders shall factor the additional cost of obtaining this permit into their bid. Permits that are found to be required after bid opening shall be obtained at no additional cost to the State.
- C. All fines levied against this project as a result of failing to apply for a required permit prior to starting work shall be borne entirely by the Contractor.
- D. All work necessary for researching permits, determining their necessity for this project, preparation and submittal of permit application document(s), payment of application fee(s), etc. up to the issuance of the approved permit(s) are considered incidental to the Contract.

1.04 ALLOWANCE

- A. Allowance includes, but not limited to, works required for environmental measures, when required by the regulation(s); unforeseen conditions and other measures, such as temporary traffic controls, temporary safety measures, security measures, and material short supply when approved by the Engineer.
- B. Use the allowance only as directed by the Engineer for the airport's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- C. Contractor's overhead, profit, and related costs for products and equipment ordered by the Airport under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- D. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit margins.
- E. At project closeout, any unused amounts remaining in the Allowance will be credited back to the State.

1.05 HOURS OF WORK FOR CONSTRUCTION

- A. Work hours for construction are subject to the following:
1. Normal work hours for Ellison Onizuka Kona International Airport at Keahole are between 8:00 AM to 5:00 PM Monday to Friday. Bidders shall not assume that they will be given work windows during these hours. The Airport reserves the right to adjust work hours in order to provide minimum interruption to Airport Operations with no additional cost to the State.
 2. Work hours shall be coordinated with the Airport Manager to provide minimum interruption to facility operations while performing work.
 3. The Contractor will be required to shift to night work hours, at no additional cost to the State, for any work that negatively impacts airport operations especially passenger movement and or comfort. Night work hours may be from Sunday night to Friday morning 10:00 PM to 6:00 AM the following day. However, starting and ending times as well as duration may be adjusted by the Airport Manager depending on the actual flight schedules and airport operational considerations. Contractor vehicles and equipment are not allowed on the aircraft apron fronting the terminal from midnight to 6:00 AM.
 4. Work hours shall be coordinated with the Airport Manager in order to protect the general public and airport employees from excessive dust and noise levels unless protective measures are taken by the Contractor (e.g. noise and/or dust control) to reduce the impact to a level acceptable to the Airport Manager.
- B. The Contractor shall work continuously throughout the project duration. The Contractor shall apply and receive approval from the Engineer in writing of all work occurring outside of normal work hours. 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 State representatives, as authorized by the State, shall be in accordance with Article VII, Section 7.5 of the General Provisions.

1.06 SITE VISIT

- A. The Contractor shall visit the work site and verify all conditions pertinent to the Contract he/she is bidding on.

1.07 COORDINATION

- A. The Contractor shall coordinate the work of different trades and shall be solely responsible for fulfillment of requirements specified herein.

1.08 SAFETY

- A. The Contractor shall take all necessary precautions to protect all his and/or her workmen and all 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. During the progress of the work, all 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.
- C. Outage: Written requests for power outage shall be submitted to the Engineer at least seven (7) days in advance or as specified in other sections of these specifications. Outage will be restricted to non-peak operational hours.
- D. Barricades and warning signs shall be erected by the Contractor in the work area to properly protect all personnel in the area.

1.09 VEHICLE PARKING

- A. Monthly parking could be purchased by making arrangements with the State .Project Manager. Contractors may purchase monthly parking at the rate of \$175.00 per month.

1.10 PROVISIONS FOR FIELD OFFICE/STORAGE SPACE

- A. 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 RUNOFF CONTROL PROGRAM.
- B. 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 uses(s), the responsibility shall then be on the Contractor to find space outside of airport property.

1.11 PROTECTION OF EXISTING STRUCTURES AND IMPROVEMENTS

- A. The Contractor shall preserve and protect all structures, equipment, and vegetations on/or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this Contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limb or branches of trees are broken during Contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those

limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Engineer.

- B. The Contractor shall protect from damage all existing improvements and utilities at/or near the work site.

1.12 TEMPORARY CONSTRUCTION SIGNS

- A. The Contractor shall install temporary construction signs where the presence of planned construction areas will obstruct the existing signage or cause the closing of an existing method of egress or ingress and/or as directed by the State. Such signs shall be in accordance with the Department of Transportation – Airports Signage and Graphics Manual, highway standards for construction warning signs for background and text colors (white letters on fluorescent yellow background). Signs may be mounted on suitable approved material other than aluminum panels. The Contractor will be responsible to fabricate and install such signs. Costs related to this activity will be considered as incidental to and included in the bid price for the various items of work in this project.

1.13 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 power, communications 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.

1.14 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. 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.
- C. 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.
- D. The Contractor shall furnish all necessary personnel, engineering equipment and supplies, materials, and transportation incidental to the accurate and satisfactory completion of this work.
- E. 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.

1.15 OPERATIONS AND STORAGE AREAS

- A. Storage & staging areas may be available on a limited basis. Due to the number of projects in progress or projected to be in progress, the State does not guarantee the availability of such areas on airport property. The Contractor may request storage & staging area(s) within AOA fence once the Notice to Proceed date is set.
- B. The Contractor shall confine all operations (including storage of material) on the Airport premises to areas authorized or approved by the Engineer. The Contractor shall hold and save the Airports Division free and harmless from liability of any nature occasioned by the Contractor's performance.
- C. The Contractor shall use only established roadways. When materials are transported in prosecuting the work, vehicle shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local laws or regulations. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, and roadways.

1.16 CLEANING UP

- A. The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Airports Division. Upon completing the work, the

Contractor shall leave the work area in clean, neat, and orderly condition satisfactory to the Engineer.

1.17 VERIFICATION OF DIMENSIONS

- A. The Contractor shall be responsible for the coordination and proper relation of his work to the work of all trades. The Contractor shall visit the premises and thoroughly familiarize himself with all details of the work and working conditions, to verify all dimensions in the field, and to advise the Owner's Representative of any discrepancy between the field measurements and the plan dimensions before performing any work.

1.18 STANDARDS & CODES

- A. Wherever references are made in the contract to the respective standards, specifications and advisory circulars in accordance with which work is to be performed or tested, it is to be understood that the edition or revision of the standards, specifications and advisory circulars in effect on the date of the bidder's proposal shall apply unless otherwise expressly set forth in the contract. Unless otherwise specified, reference to such standards is solely for technical information.
- B. In case of conflict among any such referenced standards and codes or between any such standard(s) or code(s) and the requirements of the Contract, the stricter requirement shall govern.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

PART 4 - MEASUREMENT AND PAVEMENT

4.01 METHOD OF MEASUREMENT

- A. Work under this section will be measured for payment and paid for at the pre-approved contract price.

Item No. 01000.4

Construction Work – consolidating and replacing existing fire alarm system at various locations across Ellison Onizuka Kona International Airport at Keahole.

4.02 BASIS OF PAYMENT

- A. All payments shall be full compensations for all work described under this Section, and all materials, labors, tools, equipment, and incidentals needed to complete the Contract.
- B. Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
01000.1	Temporary Traffic Signs & Controls	Allowance (ALLOW)
01000.2	Unforeseen Conditions	Allowance (ALLOW)
01000.3	Material Short Supply	Allowance (ALLOW)
01000.4	Construction Work	Lump Sum

END OF SECTION

SECTION 01100 - SUMMARY

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.

B. Related Requirements:

1. SECTION 01580 TEMPORARY FACILITIES AND UTILITIES for limitations and procedures governing temporary use of Owner's facilities.

C. Conflicts:

1. In the event of conflicts between the requirements of this Section and any other Section of this Specification the stricter requirement in the judgement of the State Project Manager shall govern.

1.02 PROJECT INFORMATION

A. Project Identification: Project AH2076-13, Fire Alarm System Upgrade

1. Project Location: Ellison Onizuka Kona International Airport at Keahole, 73-200 Kupipi Street, Kailua-Kona, HI 96740-2645. Telephone (808) 327-9520

- B. Owner: State of Hawaii Airport System owned and operated by the State of Hawaii, Department of Transportation, Airports Division
 - 1. Owner's Representative: Mr. Chauncey Wong Yuen - Hawaii Air District Manager

1.03 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and described in Section 01000, Part 1
- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.

1.04 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
 - 1. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's tenants, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

1.05 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy site and existing adjacent building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day- to-day operations. Maintain existing exits unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other

occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.

2. Notify Owner not less than ten working days in advance of activities that will affect Owner's operations.

1.06 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Coordinate work hours with the Airport Manager
- C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 1. Notify Owner not less than ten working days in advance of proposed disruptive operations.
 2. Obtain Owner's written permission before proceeding with disruptive operations. Contractors shall submit an "Outage Request Form" at Daniel K. Inouye International Airport and a written request at all other airports.
- D. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor-air intakes.
- E. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.07 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

- B. **DIVISION 01- GENERAL REQUIREMENTS:** Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

- C. **Drawing Coordination:** Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. **Terminology:** Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. **Abbreviations:** Materials and products are identified by abbreviations
 - 3. **Keynoting:** Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

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 nor paid for separately, but shall be considered incidental to and included in the prices bid for the various items of work in this project.

END OF SECTION

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provision of the Contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this section.

1.02 PROJECT DOCUMENTATION

- A. The contract will not be considered complete until required submittals have been received and accepted by the State.

1.03 DETAILED CONSTRUCTION SCHEDULE

- A. The Contractor shall submit a detailed construction schedule to the Engineer for review, no later than thirty (30) calendar days after award of the Contract. The detailed construction schedule shall be based on a detailed critical path analysis of construction activities and sequence of operations needed for the orderly performance and completion of any separable parts of any work and all work in accordance with the Contract. The schedule shall be Critical Path Method (CPM) type in the form of an arrow diagram and activity listing or comprehensive bar graph. The network diagram shall show in detail and in orderly sequence all activities on a time scale, their descriptions, durations and dependencies, necessary and required to complete all work and any separable parts thereof. The schedule shall show in detail the following information for each activity:

1. Identification by code numbers and description;
2. Duration;
3. Craft and Equipment;
4. Earliest start and finish dates;
5. Latest start and finish dates;
6. Total and free float time; and
7. Highlighted Critical Path

- B. The construction schedule shall be complete in all respects, covering in addition to activities at the site of work, off-site activities such as design, fabrication, and

procurement of equipment; the scheduled delivery dates of such equipment; submittal and approval of shop drawings and samples; ordering and delivery of materials; inspections; and testing. The schedule shall also include a manpower forecast by crafts. The detailed construction schedule shall be supplemented by a three-week schedule prepared by the Contractor and submitted to the Engineer on a weekly basis. The Contractor shall promptly inform the Engineer of any proposed change in the schedule and shall furnish the Engineer with a revised schedule and cash flow diagram within fifteen (15) calendar days after approval of such change.

- C. The schedule shall be kept up to date, taking into account the actual progress of work and shall be updated if necessary, every thirty (30) calendar days. The updated schedule shall, as determined by the Engineer, be sufficient to meet the requirements for the completion of the separable parts of work and the entire projects as set forth in the contract.
- D. Upon commencing work, the Contractor shall submit at the start of each week to the Engineer for review, a detailed two (2) week construction schedule.
- E. If at any time during the progress of the Work, the Contractor's actual progress appears to the Engineer to be inadequate to meet the requirements of the contract, the Engineer will notify the Contractor of such imminent or actual noncompliance with the contract. The Contractor shall thereupon take such steps as may be necessary to improve his progress and the Engineer may require an increase in the labor force, the number of shifts, and/or overtime operations, days of work and/or the amount of construction plants all without additional cost to the State. Neither such notice by the Engineer nor the Construction Manager's failure to issue such notice shall relieve the Contractor from his obligation to achieve the quality of work and rate of progress required by the contract. Failure of the Contractor to comply with instructions of the Engineer under these provisions may be grounds for determination by the State that the Contractor is not prosecuting work with such diligence as will assure completion within the times specified. Upon such determination, the State may employ labor and equipment and charge the Contractor for the cost thereof, including depreciation for plant and equipment or may terminate the Contractor's right to proceed with the performance of the contract, or any separable part thereof, in accordance with the applicable provisions of the contract.
- F. The Contractor shall submit to the Engineer one (1) reproducible and three (3) prints of the detailed construction schedule and of each revised schedule submitted thereafter.

1.04 SCHEDULE OF VALUES

- A. The Contractor shall submit the Schedule of Values to the Engineer for review, no later than thirty (30) calendar days after award of the Contract.

- B. Format and Content: Use the Project Specifications table of contents as a guide to establish the format for the Schedule of Values. Provide at least one line item for each Specification Section. Provide a breakdown of the contract sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Break principle work or subcontract amounts down into several smaller identifiable items of work.
- C. Identification: Include the following Project identification on the schedule of values:
1. Project name and location
 2. Project number
 3. Contractor's name and address
 4. Contract No.
 5. Date of submittal
- D. Arrange the Schedule of Values in tabular form with separate columns to indicate the following items listed:
1. Related Specification Section or Division
 2. Description of work
 3. Dollar value and percent complete
- E. Correlate line items in the Schedule of Values with other required administrative schedules and forms including;
1. Construction Schedule
 2. Application for Payment forms including continuation sheets
 3. List of Subcontractors
 4. List of principle suppliers and fabricators
 5. Schedule of submittals
- F. Round amount to nearest whole dollar; the total shall equal the contract sum.
- G. Provide a separate line item in the Schedule of Values for each part of the work where Applications for Payment may include materials or equipment, purchased, fabricated or stored, but not yet installed.

- H. Schedule Updating: Update and resubmit the Schedule of Values prior to the next Applications for Payment or when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.05 OTHER SUBMITTALS REQUIRED BEFORE CONSTRUCTION

The Contractor shall submit the following items prior to or at the pre-construction meeting or unless otherwise noted:

1. Name, residence phone number, addresses and scope of authority for the following persons:
 - a. Superintendent
 - b. Contractor's authorized representative to sign documents
 - c. Two (2) additional persons who can be contacted during non-working hours for emergencies.
 - d. Field Office location and phone numbers (cellular, pager, fax, etc.)
2. Name of Safety Officer
3. Notice of Materials to be furnished
4. Three (3) copies each of Certificates of Insurance. The State of Hawaii, Department of Transportation, Airports Division shall be named as additionally insured. If canceled, thirty (30) days written notice to the State of Hawaii must be given. If certificates are not correct, work cannot proceed.
5. Three (3) copies each Insurance and Tax Rates.
6. List of apprentices who will be working on the project supported with the Statement of Apprenticeship or copy of the Apprenticeship Agreements registered with the State Board, for each apprentice.
7. List of equipment to be used on the job. Designate maximum working height and capacity of equipment involved and their respective rental rates.
8. Three (3) copies of an expenditure (cash flow) plan consisting of an anticipated work completion graph plotting contract time and gross payment anticipated.

1.06 SHOP DRAWINGS, SAMPLES, CATALOG CUTS, AND CERTIFICATES

- A. Submittal Schedule: Prior to the submission of any shop drawings or submittals, the Contractor shall submit to the Engineer for review, a submittal schedule. The schedule

shall identify the subject matter of each submittal, the corresponding specification section number and the proposed date of submission. During the progress of work, the Contractor shall revise and resubmit the submittal schedule as directed by the Engineer.

- B. The Contractor shall submit for review to the Engineer, or to a representative designated by the Engineer, six (6) copies of all shop drawings, samples, catalog cuts and certificates. Three (3) copies will be returned to the Contractor with information of review action. The Contractor shall submit additional quantities for their subcontractor's or supplier's use. Each shop drawing, certificate of compliance, sample, and equipment list shall be checked and certified correct by the Contractor, and shall be identified with the applicable information specified hereinafter under "Submittal Identification."
- C. Revisions to the drawings may be made, and when deemed necessary by the Engineer during progress of the work, additional detailed drawings will be furnished to the Contractor. These additional drawings will be considered as forming part of the Contract.
- D. Items are to be reviewed prior to commencing fabrication or delivery of material to the job site.
- E. Each copy of the drawings, certificates, catalog cuts, and lists reviewed by the Engineer will be stamped "REVIEW ACTION" with the appropriate action noted therein. The review of the Engineer shall not be construed as a complete check but will indicate only that the general method of construction and detailing is satisfactory. Acceptance of such drawings will not relieve the Contractor the responsibility of conforming to the contract drawings and specifications or for any error or omission which may exist as the Contractor shall be responsible for the dimensions and design of adequate connections, details, and satisfactory construction of all work. Each shop drawing submitted for review shall have, in the lower right-hand corner just above title, a white space 4" x 4" in which the Engineer can place the stamp and indicate action taken. The Contractor shall also inform their subcontractors to provide this space in their preparation of shop drawings.
- F. The Contractor shall furnish working drawings for structures which shall consist of the detailed plans required to control the work. The working drawings to be furnished by the Contractor shall include, but not be limited to, stress sheets, anchor bolt layouts, shop details, erection plans, cribs, cofferdams, falsework, centering, form work, and other temporary work and methods of construction.
- G. The Contractor shall be responsible for the accuracy of dimensions and details, and for agreement of dimensions and details. The Contractor shall also be responsible for the agreement and conformity of the working drawings with the plans and specifications.
- H. All working drawings shall be accepted by the Engineer prior to implementation on the

project and such acceptance shall not operate to relieve the Contractor of responsibility under the Contract for the successful completion of the work.

1.07 MAINTENANCE DATA AND OPERATING INSTRUCTIONS

- A. Six (6) copies of maintenance data and operating instructions shall be submitted by the Contractor at the conclusion of the equipment installation. The manuals shall be assembled in one or more binders, each with a title page, typed table of contents, and heavy section dividers with numbered plastic index tabs. The binders shall be a minimum of 2 inches thick, three ring, "D slant" with hard covers. All data shall be punched for binding and composition and printing shall be arranged so that punching does not obliterate any data. The project number, project title, and Airport shall be inserted in the front and backbone binder cover.
- B. The Contractor shall submit a draft to the Engineer for review prior to the submission of the final copies.
- C. The manual shall include separate sections describing each equipment. Provide a general description of the equipment, instructions for operation, maintenance, recommended inspection points and periods for inspection, testing, adjustments, calibration procedures with illustrations, wiring diagrams, trouble shooting situations and solutions, and repair methods in a practical, complete, and comprehensive manner.
- D. For each equipment, include information on detailed parts listings (part numbers and costs) with the manufacturer's name, address, contact person, e-mail address and phone/fax numbers. Provide the contact name, address, e-mail address and phone/fax numbers of the distributor in the State of Hawaii for each equipment.
- E. Include a separate section on warranty information on all products and equipment. Provide this information in a tabular format with a listing on all products and equipments with warranty start and completion dates for each item. Include separate sections on all approved submittals, test reports, certifications, etc.
- F. All information shall be arranged in a logical, orderly sequence. Manuals submitted by the manufacturer will not be accepted.

1.08 TEST REPORTS

- A. Six copies of test reports for any material used in this Contract shall be submitted when specified or required by the Engineer.

1.09 SUBMITTAL IDENTIFICATION

- A. To avoid rejection and to clarify each submittal, the General Contractor shall have a rubber stamp made up in the following format:

General Contractor's Name

PROJECT TITLE: _____

AIRPORT: _____

STATE PROJECT NO: _____

AIP PROJECT NO: _____

THIS SUBMITTAL HAS BEEN CHECKED BY THIS GENERAL CONTRACTOR
AND IS CERTIFIED CORRECT AND IN COMPLIANCE WITH THE CONTRACT
DRAWINGS AND SPECIFICATIONS.

ITEM NO. _____

SUBMITTAL NUMBER _____

DATE RECEIVED _____

SPECIFICATION SECTION # _____

SPECIFICATION PARAGRAPH # _____

DRAWING NUMBER _____

SUBCONTRACTOR NAME _____

SUPPLIER NAME _____

MANUFACTURER NAME _____

CERTIFIED BY _____
(Contractor's Signature, Date)
(Contractor's Name and Title)

- B. This stamp "filled in" should appear on each reproducible shop drawing, on the cover sheet of copies of test and mill reports, certificates of compliance, catalog cuts, brochures, etc. The stamp should be placed on a heavy stock paper merchandise (approximately 3" x 6") and one tag tied to each sample submitted for approval. The tag on the samples should state what the sample is, so that if the tag is accidentally separated from the sample they can be matched up again. The back of this tag will be used by the Engineer for receipt, approval, and log stamp for any comments that relates to the sample.
- C. Submission Number: Each submission is to be sequentially numbered in the space provided in the Contractor's stamp. Correspondence and transmittal will refer to this number.
- D. The Contractor shall ensure that all submittals, including shop drawings, are complete and in conformance to the requirements of the Contract specifications prior to submission to the State for review and acceptance. Incomplete submittals will not be processed by the State and returned to the Contractor for correction. Any cost impacts and delays in the Project schedule as a result of incomplete submittals shall be the responsibility of the Contractor.

1.10 AS-BUILT DRAWINGS

- A. The Contractor shall maintain at the job site one (1) copy of the specifications, addenda, approved shop drawings, change orders and other modifications in good order and marked to record all changes made during construction.
- B. The Contractor shall maintain on the job site two (2) sets of full-size contract drawings, marking them in red to show all variations between the construction actually provided and that indicated or specified in the contract documents, including buried or concealed construction.
- C. Actual location of work shall be clearly recorded as the work progresses including all changes to the contract and equipment size and type. Drawings shall be available at the site at all times for inspection.
- D. The Contractor at his own expense, shall incorporate all field changes, Post Construction Document (PCD) changes, etc. in a clearly legible manner utilizing the symbols of the Contract drawings onto the red-line contract drawings. All underground stubouts shall be dimensionally located from the building structure.
- E. The Contractor shall be responsible for the accuracy of dimensions and details, and for agreement of dimensions and details. The Contractor shall also be responsible for the agreement and conformity of the working drawings with the plans and specifications.
- F. Where a choice of material or method is permitted herein or where variations in scope of character of work from that of the original contract or authorized, the drawings shall be marked to define the construction actually provided. Where equipment installation is involved, the size, manufacturer's name, model number, power input or output characteristics as applicable shall be shown on the as-built drawings.
- G. The representation of such changes shall conform to standard drafting practice and shall include such supplementary notes, legends, and details as necessary to clearly portray the as-built construction.
- H. The drawings shall be maintained and updated on a daily basis. The Contractor shall stamp, sign, and date each sheet with the following stamp:

AS-BUILT DRAWINGS/SPECIFICATIONS

This certifies that the dimensions and details shown on this sheet reflect the dimensions and details, and specifications as constructed in the field.

CONTRACTOR'S NAME

Signature

Date

I. Monthly and final payments to the Contractor shall be subject to prior approval of the drawings. On completion of the work, both sets of marked-up drawings shall be delivered to the Engineer, and shall be subject to approval before acceptance.

1.11 GUARANTEES

A. Guarantee periods shall start at time of acceptance in writing by the State.

B. All guarantees and warranties shall be made out to the "State of Hawaii." Supplier and subcontractor guarantees shall be co-signed by the Contractor.

C. The Contractor is solely responsible for coincidence or non-coincidence of factory warranties or equipment guarantees, and the Contractor's own warranties and guarantees as required by the contract. The Contractor is solely responsible for scheduling and coordinating the installation of equipment and materials so as to take maximum advantage of factory warranties.

D. Organize guarantees and warranties into an orderly sequence based on the Table of Contents of the Project Manual.

1. Bind guarantees and warranties in heavy-duty, 3-ring, vinyl covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2 x 11 inch paper (letter size).

2. Provide heavy paper dividers with plastic-covered tabs for each separate guaranty/warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of installer.

3. Identify each binder on the front and spine with the typed or printed title "GUARANTEE AND WARRANTIES", project name, and name of Contractor.

Additional Copies: Provide additional copies of each guaranty and warranty to include in each operation and maintenance manual.

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 nor paid for separately, but shall be considered incidental to and included in the bid prices for the various items of work in this project.

END OF SECTION

SECTION 01400 - CONTRACTOR QUALITY CONTROL PROGRAM

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provision of the contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this section.

1.02 GENERAL

- A. The Contractor shall establish, provide, and maintain an effective Quality Control Program that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.
- B. The intent of this section is to enable the Contractor to establish a necessary level of control that will:
 - 1. Adequately provide for the production of acceptable quality materials.
 - 2. Provide sufficient information to assure both the Contractor and the Engineer that the specification requirements can be met.
 - 3. Allow the Contractor as much latitude as possible to develop his or her own standard of control.
- C. The Contractor shall be prepared to discuss and present, at the pre-construction conference, his/her understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Program has been reviewed and approved by the Engineer. No partial payment will be made for materials subject to specific quality control requirements until the Quality Control Program has been reviewed and approved.

1.03 DESCRIPTION OF PROGRAM

- A. General Description. The Contractor shall establish a Quality Control Program to perform inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program shall be effective for control of all construction work

performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.

- B. Quality Control Program. The Contractor shall describe the Quality Control Program in a written document which shall be reviewed and approved by the Engineer prior to the start of any production, construction, or off-site fabrication. The written Quality Control Program shall be submitted to the Engineer for review no later than thirty (30) calendar days after award of the Contract.
- C. The Quality Control Program shall be organized to address, as a minimum, the following items:
 - 1. Quality control organization;
 - 2. Submittals schedule;
 - 3. Inspection requirements;
 - 4. Quality control testing plan;
 - 5. Documentation of quality control activities; and
 - 6. Requirements for corrective action when quality control and/or acceptance criteria are not met.
 - 7. A listing of the definable features of work for the project.
- D. The Contractor is encouraged to add any additional elements to the Quality Control Program that he/she deems necessary to adequately control all production and/or construction processes required by this contract.

1.04 QUALITY CONTROL ORGANIZATION

- A. The Contractor's Quality Control Program shall be implemented by the establishment of a separate quality control organization that is not a part of the production organization.
- B. An organizational chart shall be developed to show all quality control personnel and how these personnel integrate with other management/production and construction functions and personnel. The organizational chart shall identify all quality control staff by name and function, and shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work. At the top of the chart, an overall Contractor Quality Control System Manager, CQCSM, shall be named and his/her subordinates shall follow thereafter.
- C. The quality control organization shall consist of the following minimum personnel:
 - 1. Contractor Quality Control System Manager
 - a. The CQCSM shall be a full-time employee of the Contractor, or a consultant engaged by the Contractor. The CQCSM shall have a minimum of 5 years of experience in airport and/or paving and building

construction and shall have had prior quality control experience on a project of comparable size and scope as the contract. The CQCSM shall be on the project full time and shall have no production duties. The CQCSM shall NOT be the point of contact for the production organization.

The CQCSM shall have full authority to institute any and all actions necessary for the successful implementation of the Quality Control Program to ensure compliance with the contract plans and technical specifications including authority to independently stop any work not in compliance with the contract. The CQCSM shall report directly to a responsible officer of the construction firm, such officer not being the project superintendent or foreman. The CQCSM may supervise the Quality Control Program on more than one project provided that person can be at the job site within 2 hours after being notified of a problem and a Quality Control Technician is present on the job site full time.

2. Quality Control Technicians. A sufficient number of quality control technicians necessary to adequately implement the Quality Control Program shall be provided. These personnel shall be either engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate fields and shall have a minimum of 2 years of experience in their area of expertise.
 - a. The quality control technicians shall report directly to the CQCSM and shall perform the following functions:
 - i. Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by Section 1.06.
 - ii. Performance of all quality control tests as required by the technical specifications and Section 1.07.
3. Staffing
 - a. The Contractor shall provide sufficient qualified quality control personnel to monitor each work activity at all times. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The Quality Control Program shall state where different technicians will be required for different work elements.
 - b. All personnel shown on the organizational chart shall have, in resume form, all information regarding their education, any licenses, their present position, previous work experience, etc. included in the Quality Control Program written documentation. These resumes shall be verified by the CQCSM.

1.05 SUBMITTALS SCHEDULE

- A. The Contractor shall submit a detailed listing of all submittals (e.g., mix designs, material certifications, color samples) and shop drawings required by the technical

specifications. The listing can be developed in a spreadsheet format and shall include:

1. Specification item number;
2. Item description;
3. Description of submittal;
4. Specification paragraph requiring submittal; and
5. Scheduled date of submittal.

1.06 INSPECTION REQUIREMENTS

- A. Quality control inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor.
- B. Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work.
- C. Before any definable feature of work is started, the CQCSM shall notify the Engineer of such work at least 48 hours in advance. Upon notification, the Engineer shall determine if a meeting shall be held to discuss the condition of the work area, material and equipment status, what is to be expected and any questions or possible problems. No definable feature work shall commence without the consent of the Engineer.

1.07 QUALITY CONTROL TESTING PLAN

- A. As a part of the overall Quality Control Program, the Contractor shall implement a quality control testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification item, as well as any additional quality control tests that the Contractor deems necessary to adequately control production and/or construction processes.
- B. The testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:
 1. Specification item number;
 2. Item description (e.g., concrete cylinder test);
 3. Test type (e.g., concrete compressive strength);
 4. Test standard (e.g., ASTM or AASHTO test number, as applicable);
 5. Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated);
 6. Responsibility (e.g., plant technician, independent lab); and
 7. Control requirements (e.g., target, permissible deviations).
- C. The testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D 3665. The Engineer shall be provided the opportunity to witness quality control sampling and testing. The CQCSM

shall make every effort to inform the Engineer at least 24 hours, or more if stated in the specifications, before such testing occurs.

- D. All quality control test results shall be documented by the Contractor as required by Section 1.08.

1.08 DOCUMENTATION

- A. The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.
- B. These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the Engineer daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the CQCSM.
- C. Specific Contractor quality control records required for the contract shall include, but are not necessarily limited to, the following records:
 - 1. Daily Inspection Reports. Each Contractor quality control technician shall maintain a daily log of all inspections performed for both Contractor and Subcontractor operations on a form acceptable to the Engineer. These technician's daily reports shall provide factual evidence that continuous quality control inspections have been performed and shall, as a minimum, include the following:
 - a. Technical specification item number and description and location of work performed;
 - b. A comprehensive breakdown of the work force including the number of workers and total hours for each trade.
 - c. Compliance with approved submittals;
 - d. Proper storage of materials and equipment;
 - e. Proper operation of all equipment;
 - f. Adherence to plans and technical specifications;
 - g. Review of quality control tests; and
 - h. Safety inspection.
 - 2. The daily inspection reports shall identify inspections conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.
 - 3. The daily inspection reports shall be signed by the responsible quality control

technician and the CQCSM. The Engineer shall be provided at least one copy of each daily inspection report on the work day following the day of record.

4. Daily Test Reports. The Contractor shall be responsible for establishing a system which will record all quality control test results. Daily test reports shall document the following information:
 - a. Technical specification item number and description;
 - b. Test designation;
 - c. Location;
 - d. Date of test;
 - e. Control requirements;
 - f. Test results;
 - g. Causes for rejection;
 - h. Recommended remedial actions; and
 - i. Retests.

Test results from each day's work period shall be submitted to the Engineer prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical quality control charts. The daily test reports shall be signed by the responsible quality control technician and the CQCSM.

1.09 CORRECTIVE ACTION REQUIREMENTS

- A. The Quality Control Program shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the Quality Control Program as a whole, and for individual items of work contained in the technical specifications.
- B. The Quality Control Program shall detail how the results of quality control inspections and tests will be used for determining the need for corrective action and shall contain clear sets of rules to gauge when a process is out of control and the type of correction to be taken to regain process control.
- C. When applicable or required by the technical specifications, the Contractor shall establish and utilize statistical quality control charts for individual quality control tests. The requirements for corrective action shall be linked to the control charts.

1.10 SURVEILLANCE BY THE ENGINEER

- A. All items of material and equipment shall be subject to surveillance by the Engineer at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate quality control system in

conformance with the requirements detailed herein and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to surveillance by the Engineer at the site for the same purpose.

- B. Surveillance by the Engineer does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

1.11 NONCOMPLIANCE

- A. The Engineer will notify the Contractor of any noncompliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or his/her authorized representative to the Contractor or his/her authorized representative at the site of the work, shall be considered sufficient notice.
- B. In cases where quality control activities do not comply with either the Contractor's Quality Control Program or the Contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by the Engineer, the Engineer may:
 1. Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors in accordance with Section 8.5 of the General Provisions.
 2. Order the Contractor to stop operations in accordance with Section 8.6 of the General Provisions.
 3. Determine work performed by the Contractor during periods of noncompliance to be unacceptable and subject to inspection, removal or non-payment in accordance with Section 5.8 of the General Provisions.

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 nor paid for separately, but shall be considered incidental to and included in the prices bid for the various items of work in this project.

END OF SECTION

SECTION 01533 - BARRICADES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provision of the contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this section.

1.02 BARRICADES

- A. The contractor shall take precaution to protect people and property from injury and damage. He shall erect barricades to delineate his work areas and provide the appropriate signing, hazard lights, and temporary paint striping as directed by the Engineer, to aid public and airport pedestrian and vehicular traffic around his work areas. Barricades shall be traffic cones, delineators, blinker barricades, caution tape, sawhorses, plywood barricades or other barriers as approved by the Engineer to effectively provide proper protection.
- B. The contractor shall be responsible for his own security and protection of his property, including mobilization yard barricades.
- C. Barricades, in general, shall be neat and in good condition, as required for protection. In areas frequented by the general public, the barricades shall be visually presentable and plywood partitions shall be painted. Where dust is a problem, the Contractor shall erect floor to ceiling dust proof partitions
- D. The Contractor shall coordinate and sequence this work with the Engineer to permit the continuing operation of the existing Airport facility. Barricades shall be removed upon the completion and acceptance of work and the premises left clean and operational.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

- A. Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the prices bid for the various items of work in this project.

END OF SECTION

SECTION 01560 - ENVIRONMENTAL CONTROLS

PART I – GENERAL

1.1 RELATED DOCUMENTS

- A. The General Provisions, Special Provisions, and Technical Provisions, apply to the work specified in this section. Special attention is directed to the following Articles:
1. State of Hawaii, Air and Water Transportation Facilities Division, General Provisions for Construction Projects, Article VI, Control of Materials, Paragraph 6.8 Non-Conforming Materials.
 2. State of Hawaii, Air and Water Transportation Facilities Division, General Provisions for Construction Projects, Article VII, Legal Relations and Responsibility to Public, Paragraph 7.14 Pollution Control and Protection of Archeological Historical, and Burial Sites.
 3. State of Hawaii, Air and Water Transportation Facilities Division, General Provisions for Construction Projects, Article VII, Legal Relations and Responsibility to Public, Paragraph 7.17 Contaminated or Hazardous Items and Material; Regulated Items and Material; Waste.
 4. Section 01561 Construction Site Runoff Control Program.
 5. Section 01562 Management of Contaminated Media.
- B. The latest version of the State of Hawaii, Department of Transportation, Airports Division (DOTA) Construction Activities BMP Field Manual.

1.2 ENVIRONMENTAL PROTECTION

With the exception of those measures set forth elsewhere in these specifications, environmental protection shall consist of the prevention of environmental pollution as the result of construction operations under this contract. For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare, unfavorably alter ecological balances of importance to human life, affect other species of importance to man, or degrade the utilization of the environment for aesthetic and recreational purposes.

1.3 APPLICABLE REGULATIONS

In order to provide abatement and control of environmental pollution arising from the construction activities of the Contractor and their Subcontractors in the performance of this contract, the work performed shall comply with the intent of all applicable Federal, State, and Local laws and regulations concerning environmental pollution control and abatement, including, but not limited to, the following regulations:

- A. State of Hawaii, Department of Health, Administrative Rules, Chapter 55, WATER POLLUTION CONTROL; Chapter 54, WATER QUALITY STANDARDS.
- B. State of Hawaii, Department of Health, Administrative Rules, Chapter 59, AMBIENT AIR QUALITY, Chapter 60.1, AIR POLLUTION CONTROL.
- C. State of Hawaii, Department of Health, Administrative Rules, Chapter 42, VEHICULAR NOISE CONTROL.
- D. State of Hawaii, Department of Health, Administrative Rules, Chapter 46, COMMUNITY NOISE CONTROL.
- E. State of Hawaii, Occupational Safety and Health Standards, Title 12, Department of Labor and Industrial Relations, Subtitle 8, Division of Occupational Safety and Health, Part 3 Construction Standards, Chapter 145 Asbestos.
- F. Environmental Protection Agency, Code of Federal Regulations Title 40, Part 61, Subpart M (Revised Subpart B), NATIONAL EMISSION STANDARDS FOR AIR POLLUTANTS and Subpart B, NATIONAL EMISSION STANDARDS FOR ASBESTOS; Final Rule dated November 20, 1990.
- G. State of Hawaii, Department of Health, Title 11, Chapter 501, Asbestos Requirements.
- H. U.S. Department of Labor - Occupational Safety and Health Administration (OSHA) Asbestos Regulations, Code of Federal Regulations Title 29, Parts 1910, 1915 and 1926, Occupational Exposure to Asbestos, Final Rule dated August 10, 1994.

1.4 SUBMITTALS

The Contractor shall submit the following items within 30 calendar days after the Notice to Proceed Date:

- A. Submit proposed means, methods, techniques and procedures to be used for environmental control.
- B. Submit a State of Hawaii Department of Health Asbestos Notification of Demolition and Renovation Form for all demolition projects (including facilities which no asbestos is present) and renovation projects per HAR 11-501.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 AIR POLLUTION CONTROL

- A. Emission: The Contractor shall not be allowed to operate equipment and vehicles that show excessive emissions of exhaust gases until corrective repairs or adjustments are made, as determined by the Engineer.
- B. Dust: The Contractor, for the duration of the contract, shall maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas within or without the project limits free from dust which would cause a hazard to the work or operations of other Contractors, or to persons or property. Industry-accepted methods of stabilization suitable for the area involved, such as sprinkling or similar methods, will be permitted. Chemical or oil treating shall not be used.
- C. Burning on Airport property shall not be permitted.

3.2 WATER POLLUTION CONTROL

- A. Wastes: The Contractor shall not deposit, at the airport site or in its vicinity, solid waste or discharge liquid waste, such as fuels, lubricants, bituminous waste, untreated sewage, and other pollutants which may contaminate the body of ground water.
- B. Spillages: No petroleum products, bituminous materials, or other deleterious substances, including debris, are allowed to fall, flow, leach, or otherwise enter the sewage systems or storm drains. All spills shall be immediately reported by following the instructions found on the Spill Reporting Fact Sheet for the appropriate airport and completing the Spill Reporting Form. The Spill Reporting Fact Sheet and Form can be found at:

<http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/construction-site-runoff-control-program>

Any fines assessed to DOTA, as a result of Contractor's spillages or the Contractor's failure to report spillages, shall be paid by the Contractor.

Reference Specification Section 01562, Paragraph 3.3(C) Release Reporting for additional information and requirements.

- C. Erosion: The Contractor shall provide any necessary temporary drainage, dikes, and similar facilities to prevent erosion damage to the site. Run-off shall be controlled to prevent damage to the surrounding area.

3.3 NOISE CONTROL

- A. At all times keep objectionable noise generation to a minimum by:
 - 1. Equipping air compressors with silencing packages.
 - 2. Equipping jackhammers with silencers on the air outlet.
 - 3. Equipment that can be electrically driven instead of gas or diesel is preferred. If noise levels on equipment cannot reasonably be brought down to criteria, listed as follows, either the equipment will not be allowed on the job or use time will have to be scheduled subject to approval of the Engineer.
 - 4. All construction vehicles and equipment on the project operating between 10:00 p.m. and 7:00 a.m. shall be equipped with an ambient noise sensing variable volume backup alarm system. The system shall be in compliance with Title 29 of the Code of Federal Regulations, Part 1926.601(b)(4)(i).
- B. Objectionable noise received on neighboring properties is defined as any noise exceeding the noise limits of State Regulations (Title 11, Hawaii Administrative Regulations, Department of Health, Chapter 46 – Community Noise Control) or City and County of Honolulu ordinance, as stated below, or as any noise causing a public nuisance in a residential area, as determined by the State and community representatives, or by the nuisance provisions of local ordinances.
 - 1. The noise limitations established are as set forth in the following table after any applicable adjustments provided for herein are applied:

RECEIVING PROPERTY

<u>Noise Source</u>	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>
Airport	50 dBA	65 dBA	70 dBA

- 2. Between the hours of 6:00 pm to 5:00 am on weekdays and weekends, the noise limitations above may be exceeded for any receiving property by no more than:
 - a. Five dBA for a total of 15 minutes in any one hour period; or
 - b. Ten dBA for a total of 5 minutes in any one hour period; or
 - c. 15 dBA for a total of 1.5 minutes in any one hour period.
- C. In addition to the noise controls specified, demolition and construction activities conducted within 1,000 feet of residential areas may have additional noise controls required.

- D. The Contractor and its subcontractor operations shall, at all times, comply with all State of Hawaii and City and County of Honolulu requirements.
- E. For work conducted within Airport buildings, noise levels from work activities shall not exceed 85 dBA on the slow scale at the project boundary.

3.4 DISPOSAL

Construction waste, such as crates, boxes, building materials, pipes, and other rubbish shall be properly disposed of at a licensed landfill. Please consult with the local landfill to ensure that objects meet the specific landfill's requirements for size, type, etc. Other areas or methods proposed by the Contractor will be approved only if the Engineer determines that their effect on the environment is equal to or less than those described herein.

3.5 HAZARDOUS MATERIALS CONTROL

- A. The use of hazardous materials, i.e., asbestos and PCB, in the construction of this project shall be strictly prohibited. Any corrective action to remove and replace the hazardous material and contaminated work shall be at the sole expense of the Contractor.

B. DEFINITIONS

1. HAZARDOUS SUBSTANCE – Any substance designated pursuant to Section 311(b)(2)(A) of the Clean Water Act; any element, compound, mixture, solution, or substance designated pursuant to Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act; any toxic pollutant listed under Section 307(a) of the Clean Water Act; any hazardous air pollutant listed under Section 112 of the Clean Air Act, as amended (42 U.S.C. §§7401-7626); any imminently hazardous chemical substance or mixture regulated under Section 7 of the Toxic Substances Control Act, as amended (15 U.S.C. §§2601-2671), oil, trichloro propane, and any other substance or pollutant or contaminant designated by rules adopted pursuant to this chapter (Chapter 128D, Hawaii Revised Statutes)
2. OIL – Oil Waste of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, oil mixed with waste, crude oil or any fraction or residue.
3. POLLUTANT OR CONTAMINANT – Any element, substance, compound, or mixture, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism either directly from the environment or indirectly by ingestion through food chains, will or may

reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformation, in such organism or their offspring.

PART 4 – MEASUREMENT AND PAYMENT

4.1 BASIS OF MEASUREMENT AND PAYMENT

All work specified in this Section shall not be measured nor paid for separately but shall be considered incidental to item 01561, Construction Site Runoff Control Program.

END OF SECTION

SECTION 01561 - CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

PART 1 -GENERAL

1.1 DESCRIPTION

This Section describes the following:

- (A) The Contractor shall comply with the following referenced documents:
- State of Hawaii, Department of Transportation, Airports Division (DOTA) Construction Activities Best Management Practices (BMP) Field Manual, in developing, installing, and maintaining Site-Specific BMPs for all projects.
 - DOTA's Storm Water Programs (SWMPP) for the Daniel K. Inouye International Airport (**HNL**) and Kahului Airport (OGG), as applicable.
 - Hawaii Administrative Rules (HAR) Chapters 11-54, 11-55, and 11-60.
 - Honolulu's City and County "Rules Relating to Water Quality" for all projects on Oahu. Use respective Soil Erosion Guidelines for Maui, Kauai and Hawaii projects.
 - Applicable Federal, State and Local Permit Conditions.
 - All other documents referenced in this Section.

For any conflicting requirements between the referenced documents and applicable bid documents, the stricter requirement will prevail and govern. Should a requirement not be clearly described within the applicable bid documents, notify the Engineer immediately for interpretation. For the purposes of clarification, "applicable bid documents" include the construction plans, specifications, and Permits.

- (B) Detailed plans, diagrams, and written Site-Specific Best Management Practices (BMPs); construction, maintenance, and repair of temporary water pollution, dust, and erosion control measures at the project site, including local material sources, work areas, and haul roads; removal and disposal of hazardous wastes; control of fugitive dust (defined as uncontrolled emission of solid airborne particulate matter from any source other than combustion).
- (C) Work associated with construction stormwater, dewatering, and hydrotesting activities and compliance with conditions of the Notice of General Permit Coverage (NGPC) or National Pollutant Discharge Elimination System (NPDES) permit(s) authorizing discharges associated with construction stormwater, dewatering, and hydrotesting activities.
- (D) Potential pollutant identification and mitigation measures, listed in Appendix A for use in the development of the Contractor's Site-Specific BMP.

Requirements of this Section also apply to construction support activities including: concrete or asphalt batch plants, rock crushing plants, equipment staging yards/areas,

material storage areas, excavated material disposal areas, and borrow areas located both inside and outside of the Airport Property and State Right-of-Way. For areas serving multiple construction projects or operating beyond the completion of the construction project in which it supports, the Contractor shall be responsible for securing the necessary permits, clearances, and documents, and following the conditions of the permits and clearances, at no cost to the State.

The Contractor shall be responsible for all applicable subcontractors, suppliers and vendors, and shall ensure that the means and methods of construction activities of applicable subcontractors, suppliers and vendors are in full compliance with this Section.

PART 2 PRODUCTS

2.1 MATERIALS

Comply with applicable materials described in the current DOTA "Construction Activities BMP Field Manual" and Section 3 and 4 of the current City and County of Honolulu "Storm Water Best Management Practice Manual." Refer to FAA Advisory Circulars and DOTA District, including Wildlife Hazard Management Plan, for additional guidance and conditions.

In addition, materials shall comply with the following:

- (A) Grass. The FAA and USDA recommend the following grass species when requiring grass: "No-Mow" bermudagrass ("Green Velvet") (*Cynodon dactylon*) or Seashore paspalum (*Paspalum vaginatum*). These species both possess higher than average drought resistance, saline soil tolerances, and, most importantly, do not produce seed heads attractive to the majority of hazardous avian species. It is recommended that stolons, sprigs, or plugs be used to avoid providing hazardous species with a readily available food source. The use of seeds shall not be allowed.

Alternative grass species shall only be applied with the approval of the DOTA Environmental Section. This includes, but not limited to, sodding, cuttings, and planting. Grass shall be a quick-growing species. Grass shall be suitable to the area and provide a temporary cover that will not compete later with permanent cover. The grass label or tag shall be provided to the DOTA Environmental Section.

Irrigation of these grass shall be done during the hours of darkness to avoid providing another hazardous wildlife attractant.

- (B) Fertilizer and Soil Conditioners. Fertilizer and soil conditioners shall conform to Hawaii Standard Specifications for Road and Bridge Construction 2005 or latest edition, Subsection 619.02(H)(1) - Commercial Fertilizer. Fertilizers shall not be applied during inclement weather or rain events.

The use of alternative types of fertilizer and soil conditioners shall be subject to the approval of the DOTA Environmental Section.

- (C) Hydro-mulching. Hydro-mulching used as a temporary stabilization measure shall consist of specially processed fiber which shall form a homogeneous slurry after addition and agitation in hydro-mulch applicator equipment.
1. Mulches shall be recycled materials including bagasse, hay, straw, wood cellulose bark, wood chips, or other material acceptable to the DOTA Environmental Section. Mulches shall be clean and free of noxious weeds and deleterious materials.
 2. Potable water shall meet the requirements of Hawaii Standard Specifications for Road and Bridge Construction 2005 or latest edition, Subsection 712.01 - Water. Submit alternate sources of irrigation water to the Engineer for acceptance by the DOTA Environmental Section if deviating from 712.01 - Water.
 3. Soil and Mulch Tackifier shall meet the requirements and installation in accordance with portions of Hawaii Standard Specifications for Road and Bridge Construction 2005 or latest edition, Section 641 - Hydro-Mulch Seeding, including 641.02(0) - Soil and Mulch Tackifier. The use of seeds in the hydro-mulch mixtures shall not be allowed.

Alternative materials or methods to control, prevent, remove, and dispose pollution are allowable if acceptable to the DOTA Environmental Section.

PART 3 EXECUTION

3.1 PRECONSTRUCTION REQUIREMENTS

- (A) Water Pollution, Dust, and Erosion Control Meeting.
Schedule a water pollution, dust, and erosion control meeting with the Engineer after the Site-Specific BMP Plan is submitted to the Engineer and accepted in writing by the DOTA Environmental Section. The meeting shall be scheduled a minimum of 14 calendar days prior to the Start Work Date. At a minimum, the meeting shall be attended by the Contractor, applicable subcontractors, Engineer, DOTA Environmental Section and/or any authorized representatives of the designated attendees. The meeting will discuss the sequence of work, and plans and proposals for water pollution, dust, and erosion controls.
- (B) Water Pollution, Dust, and Erosion Control Submittals.
Submit a Site-Specific BMP Plan within 30 calendar days of Contract Execution to the Engineer for acceptance by the DOTA Environmental Section. Submission of the complete and acceptable Site-Specific BMP Plan is the sole responsibility of

the Contractor, and additional contract time will not be issued for delays due to incompleteness.

Include the following:

1. Written description of activities to minimize water pollution and soil erosion into drainage systems, sewer systems, and State waters. Include proposed means, methods, techniques, and procedures to be used for environmental control. BMP shall include, but not limited to, the following:
 - a. An identification of potential pollutants and their sources.
 - b. A list of all materials and heavy equipment to be used during construction.
 - c. Descriptions of the methods and devices used to minimize the discharge of pollutants into drainage systems, sewer system, and State waters.
 - d. Details of the procedures used for the maintenance and subsequent removal of any erosion or siltation control devices.
 - e. Methods of removing and disposing hazardous wastes encountered or generated during construction.
 - f. Methods of removing and disposing concrete and asphalt pavement cutting slurry, concrete curing water, and hydro-demolition water.
 - g. Spill Control and Prevention, and Emergency Spill Response Plan.
 - h. Fugitive dust control, including dust from earth-disturbing, hauling, grinding, sweeping, or brooming off operations, or combination thereof.
 - i. Methods of storing and handling of oils, paints, and other products used for the project.
 - j. Material storage and handling areas, and other staging areas, including storage of reinforcing steel and building material.
 - k. Concrete truck washouts.
 - l. Concrete waste and asphalt concrete waste control.
 - m. Fueling and maintenance of vehicles and other equipment.
 - n. Tracking of sediment offsite from project entries and exits.

- o. Litter management. Prevention of Foreign Object Debris (FOO) is essential.
 - p. Sanitary/Septic Waste Management and Facilities.
 - q. Stockpiles of Aggregates, Soils, Asphalt Concrete Material, Concrete Waste, and Asphalt Concrete Waste.
 - r. Methods of Handling and Removal of Contaminated Soils and Groundwater encountered or generated during construction.
 - s. Methods and Procedures for Dewatering.
 - t. Methods and Procedures for Hydro-Testing.
 - u. Methods and Practices for proper Housekeeping, including excessive sawdust; concrete spill prevention and removal; and collection and removal of building materials waste, such as tie wires, reinforcing steel, and lumber.
 - v. Other factors that may cause water pollution, dust, and erosion control.
2. Plans indicating location of water pollution, dust and erosion control devices; plans and details of BMP measures and devices to be installed or utilized; identify areas of soil disturbance in cut and fill; indicate areas used for construction staging and storage, including items (1) through (22) above, storage of aggregate (indicate type of aggregate), asphalt cold mix, soil or solid waste, equipment and vehicle parking, and areas where vegetative practices are to be implemented. Indicate intended drainage pattern on plans. Include flow arrows. Include separate drawing for each phase of construction that alters drainage patterns.
 3. Dates when BMP measures will be installed and removed.
 4. Name(s) of specific individual(s) designated responsible for the Contractor's Construction Site Runoff Control Program. Include cellular and business telephone numbers, fax numbers, and e-mail addresses. These individuals shall be available 24 hours a day, 7 days a week.
 5. Description of fill material to be used.
 6. For projects with an NGPC or NPDES Permit for Construction Activities, submit information to address all sections in the Storm Water Pollution Prevention Plan (SWPPP), as described in HAR Chapter 11-55, Appendix C, Section 7.

7. For projects with an NGPC or NPDES Permit, submit information required for compliance with the conditions of the Notice of General Permit Coverage (NGPC)/NPDES Permit.
8. Date and sign the Site-Specific BMP Plan.

Modify, as necessary, and resubmit amended Site-Specific BMP plans and construction schedules to the Engineer for acceptance by DOTA Environmental Section. Modify the Site-Specific BMP Plan to address, but not limited to, the following.

1. To correct conditions that develop during construction which were unforeseen during the design and pre-construction stages.
2. Changes to the Contractor's Means and Method of Construction.
3. Omitted conditions that should have been allowed for in the accepted Site-Specific BMP Plan.
4. A Site-Specific BMP measure that replaces an accepted Site-Specific BMP measure that was not satisfactorily performing.
5. Revised dates of installation and/or removal of Site-Specific BMP measures.

The modifications shall be submitted to the Engineer and accepted in writing by DOTA Environmental Section before implementing the revised Site-Specific BMPs in the field. Amendments to the Site-Specific BMP Plan shall be included with the original Site-Specific BMP Plan.

A copy of the accepted original Site-Specific BMP Plan and all accepted amended Site-Specific BMP Plans, with the signed certification by the authorized representative listed in the NGPC or NPDES Permit, shall be kept on site or at an accessible location so that it can be made available at the time of an on-site inspection, or upon request by the Engineer, DOTA Environmental Section, DOTA's Third Party Inspector, and/or DOH/EPA Representative.

- (C) Discharges of Stormwater Associated with Construction Activities. If the project scope consists of ground disturbing activities and the total work area, including all construction support activity areas (i.e. storage and/or staging areas), is one acre or more, an NPDES Permit authorizing Discharges of Storm Water Associated with Construction Activity (CWB-NOI Form C) or Individual Permit authorizing stormwater discharges associated with construction activity is required from the Department of Health Clean Water Branch (DOH-CWB).

Do not begin construction activities until all required conditions of the permit are met and submittals detailed in Subsection 01561.3.1(B) - Water Pollution, Dust, and Erosion Control Submittals are completed, submitted to the Engineer and accepted in writing by the DOTA Environmental Section.

- (D) Discharges Associated with Hydrotesting Activities. If hydrotesting activities require effluent discharge into State waters or drainage systems, an NPDES Hydrotesting Waters Permit (CWB-NOI Form F) or Individual Permit authorizing discharges associated with hydrotesting is required from the DOH-CWB.

Do not begin hydrotesting activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct Hydrotesting operations in accordance with the conditions of the permit or NGPC.

- (E) Discharges Associated with Dewatering Activities. If dewatering activities require effluent discharge into State waters or drainage systems, an NPDES Dewatering Permit (CWB-NOI Form G) or Individual Permit authorizing discharges associated with dewatering is required from the DOH-CWB.

Do not begin dewatering activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct dewatering operations in accordance with the conditions of the permit or NGPC.

- (F) Solid Waste Disclosure. Submit the Solid Waste Disclosure Form for Construction Sites, if applicable, to the Engineer within 30 calendar days of Contract Execution or upon the discovery of the solid waste. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer. This should also include documentation from any intermediary facility where solid waste is handled or processed.

- (G) Construction BMP Training. The Contractor's representative(s), identified in Section 01561.3.1(8)(4), responsible for the Contractor's Construction Site Runoff Control Program, site managers, and appropriate subcontractors' personnel shall be properly trained on environmental compliance by attending a designated DOTA training seminar (e.g. HDOT's Protect Our Water Conference) or viewing the DOTA construction and post-construction training available at:

<http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/construction-site-runoff-control-program>

Submit completed Training Roster and Construction Training Quizzes to the DOTA Environmental Section (fax: 808-838-8017 or email to dot.air.environmental@hawaii.gov) prior to the start of construction activities.

Individual workers must be trained on their site-specific BMPs by the Contractor's representative(s) and managers who are knowledgeable in the proper

manufacturer's installation, maintenance, and repair of the BMP product, or the manufacturer's authorized instructor. The Contractor shall keep training logs updated and readily available.

- (H) Health and Safety Plan. A site-specific Health and Safety Plan for excavation work conducted in the known or suspected area of contamination shall be prepared and submitted at least 15 calendar days prior to initiating any excavation work. The Plan shall be applicable to Federal and State regulations.

The Contractor shall retain and pay for the services of a Certified Industrial Hygienist (CIH), certified by the American Board of Industrial Hygiene, to certify training, and review and approve the Health and Safety Plan, excavation procedures, including the determination of the need for personal protective equipment.

The Health and Safety Plan shall describe methods, techniques, and phases for handling the contaminated soil and groundwater, if present, including:

1. A sequence of operations.
2. Method of excavation, transporting, and disposal.
3. Soil Stockpiling and Groundwater Storage procedures.
4. Proposed equipment.
5. Provisions to ensure that chemical and petroleum constituent concentrations, both airborne and in the soil, are below the Department of Health Environmental Action Level (EAL), Permissible Exposure Limit (PEL) and below the Lower Explosive Limit (LEL). Provide soil testing, air monitoring, personnel monitoring, and air sampling to ensure worker safety as determined by CIH. If airborne concentrations exceed the PEL or the LEL at the control area boundary, then, work must stop immediately and the Engineer and DOTA Environmental Section notified.

3.2 CONSTRUCTION REQUIREMENTS

Do not begin work until submittals detailed in Subsection 01561.3.1(8) - Water Pollution, Dust, and Erosion Control Submittals are completed, submitted to the Engineer and accepted in writing by the DOTA Environmental Section, and required conditions of the NPDES Permit and other applicable permits are met.

Do not expose or disturb surface area of earth material, or initiate any ground-disturbing activities (including clearing and grubbing) until BMPs are installed, functional and accepted in writing by DOTA Environmental Section and/or their designated authorized representative. Only the soil, to the extent that is required to install the BMP measures and devices, shall be disturbed and minimized to the extent possible.

Install, maintain, monitor, repair and replace BMPs, such as for water pollution, dust, and erosion control; installation, monitoring, and operation of hydrotesting activities; removal and disposal of hazardous waste indicated on plans, concrete cutting slurry, concrete curing water; or hydro-demolition water. Address all comments received from the Engineer, DOTA Environmental Section and/or DOTA's Third-party inspector.

Coordinate temporary control provisions with permanent control features throughout the construction and post-construction period.

Protect temporarily or permanently disturbed soil surface from rainfall impact, runoff, and wind before the end of each work day. Coordinate and schedule the work to the maximum extent possible to minimize the amount of exposed or disturbed surface area of earth material.

Immediately *initiate* stabilizing exposed soil areas upon completion of earth disturbing activities for areas permanently or temporarily ceased on any portion of the site. Earth - disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, or excavation within any area of the site will not resume for a period of 14 or more calendar days, but such activities will resume in the future. The term "immediately" is used in this section to define the deadline for *initiating* stabilization measures. "Immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

Any of the following types of activities constitutes *initiation of stabilization*:

1. Prepping the soil for vegetative or non-vegetative stabilization;
2. Applying mulch or other non-vegetative product to the exposed area;
3. Planting the exposed area;

4. Starting any of the activities in items (1) - (3) above on a portion of the area to be stabilized, but not on the entire area; and
5. Finalizing arrangements to have stabilization product fully installed in compliance with the deadline for completing initial stabilization activities.

After the initiation of stabilization, stabilization activities shall be completed by the following deadline.

1. For projects with an NGPC or NPDES Permit for Construction activities:
 - (a) For construction areas discharging into waters not impaired for nutrients or sediments, complete stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.
 - (b) For construction areas discharging into nutrient or sediment impaired waters, complete stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities.
2. For projects without an NGPC or NPDES Permit for Construction activities, complete stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

Any of the following types of activities constitutes completion of stabilization activities:

1. For vegetative stabilization, all activities necessary to initially plant the area to be stabilized; and/or
2. For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

If the Contractor is using vegetative cover for temporary or permanent stabilization and is unable to meet the deadlines above due to circumstances beyond the Contractor's control, the Contractor shall notify and provide documentation of the circumstances to the Engineer for acceptance by DOTA Environmental Section. The Contractor shall include in their documentation the schedule that the Contractor will follow for initiating and completing stabilization. If agreed to by DOTA Environmental Section, the Contractor may, instead, comply with the following stabilization deadlines:

1. Immediately initiate, and complete within the timeframe shown above, the installation of temporary non-vegetative stabilization measures to prevent erosion;
2. Complete all soil conditioning, planting, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site.

Follow the applicable requirements of the contract documents including Hawaii Standard Specifications for Road and Bridge Construction 2005 or latest edition, Section 619 and Section 641, as amended.

Where necessary to prevent erosion on the planted area, immediately install non-vegetative erosion controls that provide cover (e.g., mulch, rolled erosion control products) to the area while vegetation is becoming established.

Protect exposed or disturbed surface area with mulches or hydro-mulch with no seeds. Spray mulches at a rate of 2,000 pounds per acre. Add tackifier to mix at a rate of 85 pounds per acre. For hydro-mulch, use the ingredients and rates required for mulches. Apply fertilizer, if applicable, per the manufacturer's recommendations. Mulches, hydro mulch, and/or fertilizers shall not be applied during inclement weather or rain events. Submit recommendations from a licensed Landscape Architect when deviating from the application rates above or manufacturer's recommendations.

Install velocity dissipation measures when exposing erodible surfaces greater than 15 feet in height.

BMP measures shall be in place and operational at the end of each work day or as required by Section 01561.3.1(B).

Install and maintain stabilized construction entrances, including any wheel washes, to minimize tracking of dirt and mud onto roadways, sidewalks, and other paved areas. Restrict traffic to stabilized construction entrance areas only. Clean dirt, mud, or other material tracked onto the road, sidewalk, or other paved area by the end of the same day in which the track-out occurs. If tracking is excessive or sediment is being transported farther along the pavement or sidewalk by other vehicles traveling outside of the construction site, then, conduct cleaning and sweeping immediately. Modify stabilized construction entrances, as needed, to prevent mud from being tracked onto road. Stabilize entire access roads if necessary.

Maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas within the project limits free from dust which would cause a hazard to the work, airport operations, operations of other contractors, or to persons or property. Chemicals may be used as soil stabilizers for erosion and dust control. Submit the manufacturer's product data sheets of the chemicals to the Engineer for acceptance by the DOTA Environmental Section. Oil treating shall not be used. When using water for dust control, only potable water, that conform to Hawaii Standard Specifications for Road and Bridge Construction 2005 or latest edition, Subsection 712.01 - Water, shall be used. Dust screens and fabrics are not allowed on, or inhibit the view of, the TSA and AOA Security Fences.

Cover exposed surface of materials completely with tarpaulin or a similar device when transporting aggregate, soil, excavated material, or other materials that may be a source of fugitive dust.

Provide temporary slope drains of rigid or flexible conduits to carry runoff from cuts and embankments. Provide portable flume at the entrance. Shorten or extend temporary slope drains to ensure proper function.

Protect ditches, channels, and other drainageways leading away from cuts and fills at all times by either:

1. Hydro-mulching the lower region of embankments in the immediate area.
2. Installing check dams and siltation control devices.
3. Other methods acceptable to the DOTA Environmental Section.

Provide for controlled discharge of waters impounded, directed, or controlled by project activities or erosion control measures.

Cleanup and remove any pollutant that is attributed to the Contractor. Deposit of solid waste or the discharge of liquid waste, such as fuels, lubricants, bituminous waste, untreated sewage and other pollutants which may contaminate the body of ground water shall not be permitted. Care shall be taken to ensure that no petroleum products, bituminous materials, or other deleterious substances, including debris, are allowed to fall, flow, leach, or otherwise enter the sewage systems or storm drains.

Burning of matter or waste material on Airport property shall not be permitted.

The use of hazardous materials is prohibited without the approval of the Engineer. Any corrective actions to remove and replace the hazardous material and contaminated work shall be at the sole expense of the Contractor. Hazardous materials shall be properly stored and handled.

3.3 INSPECTIONS

For all projects with earth-disturbing activities, including construction support activity areas, the following inspections shall be conducted:

- (A) Initial Inspection of BMPs. Prior to the start of construction activities, the DOTA Environmental Section, or their designated authorized representative, will conduct an initial site inspection of the BMPs.

The Contractor shall submit their request for this inspection in writing to the Engineer. The inspection is subject to the availability of the DOTA Environmental Section or their designated authorized representative.

Prior to this inspection, only the soil, to the extent that is required to install the BMP measures and devices, shall be disturbed. During the inspection, the inspector will note any deficiencies in the BMP measures and devices, including identifying any site conditions that have the potential to result in the discharge of pollutants. The

Contractor is responsible for the correction of the deficiencies. Corrective Action shall be documented and submitted to the Engineer for acceptance by the DOTA Environmental Section and/or their designated authorized representative. The deficiencies must be corrected and accepted before construction activities are allowed to commence.

Initial Inspections shall be conducted separately for each new construction phase, new work areas, and additional construction support areas that occur during the construction period.

- (B) Contractor's Inspection of BMPs. Commencing immediately after the Initial BMP Inspection and until the acceptance of the Final BMP Inspection, the Contractor shall conduct inspections of the sites to ensure that BMPs are effective and activities do not have the potential of causing a polluted discharge.

The Contractor's Inspections shall be conducted at the following intervals:

1. Weekly.
2. Within 24 hours of any rainfall of 0.25 inch or greater which occurs in a 24-hour period.

The Contractor shall use on-line rainfall measurements data sources and providers. Rainfall measurements shall be taken from the same airport as the location of the project or within one (1) mile distance from the disturbed areas. Submit the identity of the provider, with the location of their measuring device, to the Engineer for approval by DOTA Environmental Section.

In lieu of using any on-line rainfall provider or if there are no measuring device of an on-line provider on the airport or within one (1) mile from the disturbed area, the Contractor shall furnish and install a rain gauge in a secure location prior to field work including installation of site-specific BMPs. Provide a rain gauge with a tolerance of at least 0.05 inches of rainfall. Install the rain gauge on the project site in an area that will not deter rainfall from entering the gauge opening. Do not install in a location where rain water may splash into the rain gauge. The rain gauge installation shall be stable and plumbed. Maintain rain gauge and replace any rain gauge that is stolen, does not function properly or accurately, is worn out, or needs to be relocated. Do not begin field work until the rain gauge is installed and Site-Specific BMPs are in place. Rain gauge data logs shall be readily available.

Submit rain gauge data logs weekly with the Contractor's BMP Inspection Report to the Engineer for acceptance by the DOTA Environmental Section.

3. When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

Prepare a written report of the inspection and submit a copy of the report within 24-hours to the Engineer for acceptance by the DOTA Environmental Section. The report must include any deficiencies of the Site-Specific BMPs observed and the correction of these deficiencies. Corrective actions can be documented in a separate report and submitted upon completion of the corrective actions. Submit the report(s) to the Engineer for acceptance by DOTA Environmental Section.

The initiation of the work to repair or correct the deficiency shall begin immediately. However, except for those deficiencies that pose an immediate threat for the discharge of pollutants to the drainage system, surface waters, or receiving water, if the deficiency is identified at a time in the day in which it is too late to initiate the work, the initiation of the work shall begin on the following day.

After the initiation of the work to repair or correct the deficiency, the work shall be completed as follows:

1. If the deficiency poses an immediate threat for the discharge of pollutants to the drainage system, surface waters, or receiving waters, the work to fix the deficiency shall be completed by the close of the same day of discovery of the deficiency. Examples of these deficiencies included, but not limited to, illicit discharge, absence of perimeter controls in an area with evidence of sediment transporting off-site, and spills near a drain or waterway that have not been cleaned.
2. If the deficiency poses a significant threat for the discharge of pollutants to the drainage system, surface waters, or receiving waters, the work to fix the deficiency shall be completed by five (5) calendar days or before the next forecasted rain event, whichever is sooner. Examples of these deficiencies include, but not limited to, perimeter controls that are not functional or require maintenance, drain inlet protections that are not functional or require maintenance, installation of a new pollution prevention control, and deficiencies requiring significant repair for the correction of the deficiency.
3. If the deficiency does not pose a threat for the discharge of pollutants to the drainage system, surface waters, or receiving waters, but are not in strict conformance with the SWPPP, SSBMP Plan, or DOTA's Construction Activities BMP Field Manual, the work to correct the deficiency shall be completed by ten (10) calendar days or within the time specified by the Engineer, whichever is sooner. These deficiencies include all deficiencies except those deficiencies included in (1) and (2), above.
4. If it is infeasible to complete the correction of the deficiency or installation of a new pollution prevention control within the respective timeframe above,

notify the Engineer who will consult with DOTA Environmental Section. Document why it is infeasible to complete the work within the required timeframe. Complete the work as soon as practicable and as agreed to by both the Engineer and DOTA Environmental Section.

Retain copies of these inspection reports on-site or at an accessible location for the duration of the project so that they can be made available at the time of an on-site inspection, or upon request by the Engineer, DOTA Environmental Section, DOTA's Third Party Inspector, and/or DOH/EPA Representative. Present these inspection reports to the DOTA's Third-Party Inspectors at the time of their inspection for review.

- (C) Final Inspection /- Post-construction 8MP Initial Inspection. The DOTA Environmental Section, or their designated authorized representative, shall conduct a Final Inspection / Post-Construction 8MP initial inspection when the Contractor has completed construction, including installing permanent 8MPs and stabilizing exposed soil.

The Contractor shall submit the request for this inspection in writing to the Engineer. The inspection is subject to the availability of the DOTA Environmental Section or their designated authorized representative.

All deficiencies noted must be addressed before the Contractor can remove temporary 8MPs and close the site. The Contractor is responsible for correction of the deficiencies. Corrective Action shall be documented and submitted to the Engineer for acceptance by the DOTA Environmental Section. Any deficiencies noted during the final inspection must be corrected before the State will issue the project final acceptance and make final payment.

Partial Final Inspection of construction phases or partial areas of the project shall be conducted during the construction of the project for areas that are to be transferred for DOTA's use.

- (D) Routine Inspections Conducted by DOTA The Contractor's designated representative specified in Subsection 01561.3.1(8)(4) shall address any Site-Specific 8MP deficiencies brought up by the Engineer or their authorized representative (i.e. Quality Control Engineer, Project Inspector, etc.) taking all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational.

The initiation of the work to repair and correction of the deficiency shall be completed within the same timelines as required in Subsection 01561.3.3(8).

- (E) DOTA's SWMPP Inspections. For Projects located at the Daniel K. Inoué International Airport (HNL) or the Kahului Airport (OGG) that have a NGPC or NPDES Permit, or disturb one acre or more, including the construction support activity areas, the following additional inspections shall be conducted:

1. Third-Party Inspections. The DOTA Environmental Section's Third-Party inspector will conduct routine inspections. Third-party inspections shall be conducted monthly. The frequency of the inspections may increase if deficiencies are identified as determined by the inspector. Deficiencies must be corrected within the timeline defined in DOTA's SWMPP, Section C, Construction Site Runoff Control Program, which can be downloaded from the website:

<http://hidot.hawaii.gov/airports/doingbusiness/engineering/environmental/construction-site-runoff-control-program/>

The Contractor shall be responsible for the correction of ALL deficiencies identified during any of the above inspections. Corrective Action shall be documented and submitted to the Engineer for acceptance by the DOTA Environmental Section or their designated authorized representative.

If the Contractor fails to satisfactorily address Site-Specific BMP deficiencies, the DOTA reserves the right to employ outside assistance or use the State's own labor forces to provide necessary corrective measures. The Contractor will be fully responsible for all cost and time. The State will charge the Contractor such incurred costs plus any associated project engineering costs and will make appropriate deductions from the Contractor's monthly progress payment.

Failure to apply or maintain Site-Specific BMP measures may result in the assessment of liquidated damages (Appendix B). Depending on the severity of the deficiencies, additional enforcement actions, such as, suspension of work and/or termination of the contract (with the Contractor's Surety being fully responsible for all additional costs incurred by the State) can be conducted and assessed against the Contractor.

For all citations or fines received by the DOTA for non-compliance, including non-compliance with NGPC/NPDES Permit conditions, the Contractor shall reimburse the State within 30 calendar days for the full amount of outstanding cost that the State has incurred, or the State shall deduct all incurred costs from the Contractor's monthly progress payments.

The Contractor shall be responsible for all citations, fines and penalties levied by DOH or EPA against the State due to the Contractor's failure to satisfactorily address Site-Specific BMP deficiencies and/or any Contractor's illicit discharges. The State will make the appropriate deductions from the Contractor's monthly progress payment.

PART 4 MEASUREMENT AND PAYMENT

3.1 BASIS OF MEASUREMENT AND PAYMENT

The work specified in this Section will be paid for at the contract lump sum price. Payment shall be full compensation for work prescribed in this Section and contract documents,

including but not limited to, all labor, materials, tools, equipment, and all incidentals necessary to install, maintain, monitor, repair, replace, modify, and remove Site-Specific BMP measures.

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
01561.1	Construction Site Runoff Control Program	Lump Sum

Partial payments shall be paid in the Monthly Progress Payment as follows:

1. 20% of the line item price shall be paid upon DOTA Environmental Section's acceptance in writing of the Site-Specific BMP Plan and the satisfactory completion of the Initial Inspection of BMPs defined in Section 01561.3.3(A), above.
2. 60% of the line item price shall be paid in equal monthly payments over the duration of the contract. Failure to satisfactorily apply, maintain, or modify BMP measures and devices, and/or submittals shall result in the withholding of monthly progress payments for this line item.

For projects located at the Daniel K. Inouye International Airport (HNL) or the Kahului Airport (OGG) that have a NGPC or NPDES Permit, or disturb one (1) acre or more, including construction support activity areas, payments shall be made only after the DOTA's Third-Party Inspection defined in Section 01561.3.3(E), above, have been satisfactorily completed and accepted by the DOTA Environmental Section. Any deficiencies classified as Major or above will result in the withholding of monthly progress payments for this line item.

3. The remaining 20% of the line item price shall be paid after all BMP measures have been satisfactorily removed.

Payment will be made only after the satisfactory completion of the Final Inspection / Post-Construction BMP Initial Inspection defined in Section 01561.3.3(C), above, and acceptance of the Post-Construction BMPs by the DOTA Environmental Section.

Liquidated Damages, up to \$25,000 per day (Appendix 8), shall be assessed for each non-compliance of the BMP requirements described in this Section. The Contractor shall not be entitled to recover any Liquidated Damages assessed, even after the deficiencies have been corrected.

Appendix A

The current DOTA's Construction Activities Best Management Practices (BMP) Field Manual can be found on DOTA's Environmental Website at

<https://hidot.hawaii.gov/airports/doing-business/engineering/environmental/construction-site-runoff-control-program/>

The manual is periodically updated and should be downloaded via the website to ensure that the latest version is applied. The manual identifies potential pollutant sources and BMPs that should be used to mitigate pollutants.

Additional information and requirements for stormwater programs at all airports can also be found at the above website, including additional requirements for Daniel K. Inouye International Airport (HNL) and Kahului Airport (OGG).

Appendix B Liquidated Damages Schedule for Non-Compliances.

Non-Compliance	Amount
Failure to submit a Notice of Intent or otherwise obtain a permit for Staging and/or Storage Area beyond the project limits.	\$1,000 per calendar day per violation.
Failure to comply with the conditions specified in the Notice of General Permit Coverage (NGPC) or Individual NPDES Permit, or any other applicable permit.	\$1,000 per calendar day per violation.
Failure to have the accepted SSBMP Plan and Amendments or the accepted SWPPP and Amendments available at a project construction site.	\$1,000 per calendar day per violation.
Failure to install a BMP specified by the SSBMP Plan or SWPPP, or permit.	\$2,000 per calendar day per violation.
Failure to properly install or maintain appropriate Site-Specific BMPs in accordance with applicable plans, permits, and guidance documents.	\$2,000 per calendar day per violation.
<p>Failure to have an accepted Amendment to the SSBMP Plan or an accepted Amendment to the SWPPP prior to implementation of the proposed BMPs.</p> <p>Note: Advance review and acceptance can be provided via email which will satisfy this non-compliance. However, the written Amendment must still be formally submitted for certification and signature by the authorized representative identified in the NGPC or NOPES Permit.</p>	\$2,000 per calendar day per violation.
Failure to conduct required inspections.	\$1,000 for each of the first ten violations, \$2,500 for each of the next ten violations, \$5,000 for each subsequent violation.
Failure to submit required reports such as BMP inspection reports, rain gauge data logs, etc.	\$500 per calendar day for the first ten days of each violation, \$1,000 per calendar day for the next ten days of each violation, \$2,500 per calendar day for each subsequent day of violation.

Non-Compliance	Amount
Any "major" or "critical" non-compliance violation with the applicable plans, permits, and guidance documents.	Up to \$25,000 per calendar day per violation.
Any violation resulting in a polluted discharge.	Up to \$25,000 per calendar day per violation.

Note: Liquidated Damages shown in the Table shall be assessed at the discretion of the DOTA.

Assessment of Liquidated Damages for Non-Compliance:

The Contractor may be assessed liquidated damages by issuance of an Enforcement Letter. The Enforcement Letter shall indicate the amount of liquidated damages that are assessed for the non-compliances which shall be deducted from the Contractor's next progress payment. The Enforcement Letter will be sent electronically via e-mail and a hard copy to the Contractor's designated representative(s), identified in Section 01561.3.01(2)(d), responsible for the Contractor's Construction Site Runoff Control Program. An Enforcement Letter may be issued with or without a previous Verbal Notification, Warning Letter, or Notice of Apparent Violation (NAV).

Liquidated Damages may be assessed for the following:

- Non-compliances listed in the Table, herein, included in Appendix B.
- Non-compliances have not been corrected in the timeframes noted.
- Corrective actions are not completed after a Verbal Notification, Warning Letter, or Notice of Apparent Violation is issued.
- Contractors are non-responsive to DOTA's directives.
- Repeated non-compliance.
- A polluted discharge has occurred.

The number of days used for the liquidated damages calculations shall start on the day that the non-compliance was required to be corrected and shall end on the day that the non-compliance is corrected and accepted. If DOTA's personnel are not able to go out in the field to verify that the BMP deficiencies are corrected in the timeframe specified, the Contractor can send photographs showing the corrected deficiency via e-mail to the Engineer and DOTA Environmental Section along with documentation on how the deficiency was corrected. The Engineer and DOTA Environmental Section may visit the site to verify the corrective actions are acceptable. If the

corrective actions are acceptable, then the clock stops on the day that the documentation was received.

END OF SECTION

SECTION 01562-MANAGEMENT OF CONTAMINATED MEDIAS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

The General Provisions, Special Provisions, and General Requirements of the Specifications apply to the work specified in this section.

1.2 DESCRIPTION AND SCOPE OF WORK

- A. This Section describes procedures for the management of contaminated media (soil, groundwater, and soil vapor) that may be disturbed during excavation activities associated with this project.
- B. The Contractor shall supply all labor, materials, and equipment necessary for the removal, temporary storage, testing, handling, soil backfilling and management of contaminated media to carry out the work in accordance with these specifications, and all applicable Federal, State, and local regulations and latest amendments.
- C. The Contractor shall examine the State of Hawaii, Department of Transportation, Airports Division (DOTA) Programmatic Environmental Hazard Evaluation and Environmental Hazard Management Plan (DOTA EHE-EHMP) and, if included as part of these specifications, the Environmental Site Assessment (ESA) Phase II, to understand the conditions that may affect work and performance. Should the Contractor deviate from the DOTA EHE-EHMP or ESA, the Contractor shall be responsible to prepare a DOH required Construction EHMP (C-EHMP) utilizing the C-EHMP Addendum Template or most recent version provided by DOH, also known as a Site-Specific EHMP. Any deviation will require approval by the State of Hawaii, Department of Health (HDOH) and DOTA Environmental Section (DOTA AIR -EE) prior to implementation, using the forms provided in Appendix B of the DOTA EHE-EHMP. The forms should detail deviations from standard practices in the text and explain how those deviations will be protective of human health and the environment. The forms should be submitted to HDOH and DOTA AIR-EE for review and approval if deviations are requested or if notifying of a release.
- D. It should be noted that the DOTA EHE-EHMP is for Contaminants of Potential Concern (COPCs) which include, but not limited to, the following:
- Petroleum Substances, e.g., TPH, TPH-g, TPH-d, TPH-o, BTEX, and PAHs.
 - Chlorinated Solvents, e.g., voes
 - Polychlorinated Biphenyls (PCBs)
 - Pesticides, e.g., chlordane
 - Heavy Metals, e.g., Arsenic, Barium, Cadmium, Total Chromium, Lead, Mercury, Selenium, and Silver.

In addition, free product (e.g., gasoline, diesel fuel, fuel oils, lubricating oils, benzene, toluene, xylenes) may be encountered in areas of previous petroleum releases.

Should the ESA Phase II identify contaminants other than those listed above or there

is a risk to human health and/or the environment (such as indoor air quality in an occupied building), the Contractor shall be responsible to revise, update, and finalize the C-EHMP Addendum. The Contractor shall coordinate with, as well as have their C-EHMP approved by HDOH prior to the start of any ground disturbing activities.

1.3 REFERENCES

- A. Programmatic Environmental Hazard Evaluation and Environmental Hazard Management Plan dated July 2019, or its latest edition.
- B. DOTA's Storm Water Management Program Plan (SWMPP) for the Daniel K. Inouye International Airport (HNL) and Kahului Airport (OGG), including DOTA's Construction Activities BMP Field Manual dated August 2019, or its latest edition.
- C. All work under this contract shall be performed in strict accordance with all applicable Federal, State, and local regulations, standards, and codes governing contaminated media.
- D. The most recent editions of any relevant regulations, standards, documents, or codes shall be in effect, including, but not limited to, the following. Where conflicts among the requirements or with these specifications exists, the most stringent requirements shall apply.
 - 1. 29 CFR 1910, "Occupational Safety and Health Standards".
 - 2. 29 CFR 1926, "Safety and Health Regulations for Construction".
 - 3. 40 CFR 50, "National Primary and Secondary Ambient Air Quality Standards A".
 - 4. 40 CFR 122, "EPA Administered Permit Program: The National Pollutant Discharge Elimination System".
 - 5. 40 CFR 261, "Identification and Listing of Hazardous Waste".
 - 6. 40 CFR 263, "Standards Applicable to Transporters of Hazardous Waste".
 - 7. 40 CFR 302, "Designation, Reportable Quantities, and Notification".
 - 8. 49 CFR 172, Subpart E, "Labeling".
 - 9. 49 CFR 172, Subpart F, "Placarding".
 - 10. The Hawaii Environmental Response Law (Hawaii Revised Statutes [HRS] Chapter 128D) and the State Contingency Plan (Hawaii Administrative Rules [HAR] Title 11, Chapters 451-1-451-24).
 - 11. The Hazard Evaluation and Emergency Response Office Technical Guidance Manual (TGM) for Implementation of the State Contingency Plan (Interim Final, June 21, 2009).
 - 12. Hawaii Hazardous Waste Laws and Regulations (HRS Chapter 342J, HAR Title 11, Chapters 260.1-279.1).

13. Hawaii Solid Waste Laws and Regulations (HRS Chapters 342H and I, HAR Title 11, Chapter 58.1).
14. Hawaii Underground Storage Tank Laws and Regulations (HRS Chapter 342L; HAR Title 11, Chapter 280.1).
15. Hawaii Water Quality Standards (HAR Title 11, Chapter 54).
16. Hawaii Ambient Air Quality Standards (HAR Title 11, Chapter 59).
17. Hawaii Occupational Safety and Health Standards (HAR Title 12, Subtitle 8).
18. Hawaii Department of Health, Office of Hazard Evaluation and Emergency Response. Screening for Environmental Hazards at Sites with Contaminated Soil and Groundwater. Website URL: <http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/EALs>. Fall 2011 (and updates).
19. Hawaii Department of Health, Office of Hazard Evaluation and Emergency Response. Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material. Website URL: <http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/technical-guidance-and-fact-sheets>. October 8, 2017 (and updates).
20. Hawaii Department of Health, Office of Hazard Evaluation and Emergency Response. Construction EHMP Addendum Template, available from AIR-EE.
21. U.S. Environmental Protection Agency (EPA): Comprehensive Environmental Restoration, Compensation, and Liability Act, Section 107(1), 1980, exemption for cleanup of legally applied pesticide products.

PART 2 - PRODUCTS

2.1 PERSONAL PROTECTIVE EQUIPMENT & SIGNAGE

- A. Provide workers with Personal Protective Equipment (PPE) according to the Contractor's PPE Assessment.
- B. Provide warning signs and labels to protect the workers and the public.

2.2 POLYETHYLENE SHEETING

Sheet plastic shall be new, and clear or black with at least 20-mil thickness. A 6-mil plastic sheet can be used to cover the stockpiles.

PART 3- EXECUTION

3.1 GENERAL WORK PROCEDURES

- A. Prior to beginning work, the Contractor, the Contractor's Qualified Environmental Professional, and DOTA Engineer or its representative shall discuss the approved

Work Plan, as described in Paragraph 3.2 below, including work procedures and safety precautions.

- B. Communicate any existing, potential, or new hazards to workers before a job begins or as necessary. The workers shall be aware of the need for proper safety procedures and be familiar with the Contractor's Work Plan.
- C. Boundaries shall be established at each area where soil excavation is to be performed. The area shall be clearly identified to prevent unauthorized entry. Establish a control area by completely enclosing/roping-off the area where contaminated soil excavation, removal, stockpiling and disposal operations will be performed.
- D. Provide physical boundaries around the control area by roping-off the area to ensure that airborne concentrations of COPC will not exceed permissible exposure limits outside the control area.
- E. Where applicable, caution signs shall be placed at the entrances to each work area, located such that approaching personnel may read the signs and take necessary precautions before entering the work area. No one will be permitted in the work area unless the person is provided with appropriate training and protective equipment.
- F. It should be noted that, in some cases, the contamination may not be identifiable through visual and/or olfactory observation (e.g., soil contaminated with metals, PCBs, pesticides, etc.) and contaminant-specific field screening techniques may need to be implemented.
- G. Measure, monitor, and record worker exposure to toxic materials or harmful agents as necessary.
- H. Follow Decontamination regulations and procedures as necessary.
- I. Soil excavation activities, grading, and any disturbance of impacted soil may cause a potential exposure to Contractor's employees and the general public due to fugitive dust. The routes of exposure of dusts are by inhalation, ingestion, and dermal contact. The Contractor shall use engineering controls such as water spraying and wind barriers to control fugitive dust.
- J. The Contractor shall test residual soils not used as backfill for COPC. Soils with concentrations above regulatory and/or unrestricted use environmental action levels shall be disposed of in accordance with regulatory requirements.
- K. Report construction activities in areas with contaminated soil or groundwater by completing the appropriate forms in the DOTA EHE-EHMP, Appendix 8.3 Construction Activities Release Response Plan. Submit the forms to the HDOH Office of Hazard Evaluation and Emergency Response (HEER Office) and provide a copy of the forms to the DOTA Engineer and DOTA AIR-EE.

3.2 PRECONSTRUCTION REQUIREMENTS

- A Submit the following a minimum of 30 calendar days prior to beginning any ground

disturbing activities, for approval by DOTA AIR-EE.

1. Contractor's Work Plan for Known or Suspected Areas of Contaminated Media:

- a. The Contractor shall submit their work plan which shall include, but not limited to, a Site-Specific Health and Safety Plan (HASP) or if needed, a C-**EHMP**. The work plan shall describe the procedures, engineering controls, and methods the Contractor will use during the excavation, temporary storage, handling, treatment, backfilling, and disposal of soil and/or water at the project site. The plan shall also include soil stockpiling and segregation, testing, contaminated soil and water quality testing, contaminated soil and water disposal procedures, backfilling procedures, personal protection requirements, work area isolation, construction barriers, wetting methods, decontamination procedures, and emergency procedures. The work plan shall be in accordance to all applicable Federal, State, and local regulations and latest amendments.

For locations within the airport which DOTA has already established a Site-Specific EHMP from previous projects, the DOTA's Site-Specific EHMP, shall govern where applicable.

- b. The plan shall include the names of the Contractor's and their subcontractor's qualified personnel who will be supervising or managing the management of contaminated materials at the site. Include the personnel's phone number and qualifications.
- c. The plan shall include the name(s) of the Contractor's Qualified Environmental Professional, including their qualifications.
- d. Proposed schedule of work.
- e. A sketch identifying the location of temporary soil stockpiling and water storage devices, including pipes and appurtenances, if applicable.
- f. A map showing the location of the work and nearest medical facilities and hospitals.
- g. A copy of this Work Plan must be on the construction site and available at all times.
- h. The Work Plan shall be amended to reflect changes to the site or work conditions, as needed.

B. **QUALIFIED ENVIRONMENTAL PROFESSIONAL**

The Contractor shall employ a Qualified Environmental Professional who possesses five (5) years, minimum, experience providing environmental oversight for the management of contaminated media during construction activities. The Environmental Professional shall assist in the preparation of the Contractor's Work Plan by reviewing the work procedures, including the determination of the need for

PPE, and to provide environmental oversight during construction. The Environmental Professional shall be identified in the Work Plan, including a list of their environmental qualifications, for approval by DOTA AIR-EE.

C. CONTRACTOR TRAINING

The Contractor and its subcontractors shall implement safe work places and practices by eliminating, mitigating, or protecting against existing or potential hazards to the workers who may be exposed to harmful, hazardous, and toxic materials and substances, including contaminated water and soil.

3.3 CONSTRUCTION REQUIREMENTS

A. SOIL EXCAVATION AND STOCKPILING

1. Notify the HDOH Clean Water Branch (CWB) at least 90 calendar days prior to disturbing contaminated soil from known areas of contamination. Notify the HDOH HEER Office at least seven (7) calendar days prior to construction activities that could disturb known contaminated soil.
2. The HDOH HEER Office shall be immediately notified if contaminated soils are encountered. The disturbance of contaminated soil shall be performed in accordance with the Contractor's approved Work Plan, the DOTA EHE-EHMP, or a C- EHMP Addendum where applicable. HDOH HEER Office will determine whether additional sampling is required. Provide a location map with Global Positioning System (GPS) coordinates and approximate depth (bgs) at which the contaminated soils were encountered to the DOTA Engineer and DOTA AIR-EE.
3. During excavation and disturbance of impacted soil, all workers, supervisory personnel, subcontractors, and consultants must take precautionary measures as necessary to prevent exposure of the workers and the general public to chemicals of concern (COCs) by contaminated soil dust and inhalation of associated vapors.
4. The Contractor's Qualified Environmental Professional shall direct the segregation of the soil into three (3) separate soil piles: Pile No. 1 will consist of clean soil; Pile No. 2 will consist of soil excavated from areas found to be contaminated or suspected to be contaminated; and Pile No. 3 will consist of soil that is grossly contaminated. Contaminated soil stockpiles, suspected contaminated soil stockpiles, and grossly contaminated soil stockpiles shall be placed onto 20-mil plastic sheeting. Underlay edges of the plastic sheeting with bermed soil. Ensure that the height of the bermed soil will be sufficient to prevent stormwater runoff from breaching it. Place the excavated soil inside the bermed area on top of the plastic sheeting. Cover the stockpiles with 6 mil plastic sheeting in the bermed area to mitigate dust concerns caused by wind and prevent contact with rainwater and stormwater runoff. Secure the plastic cover with sufficient ballast and place sediment control devices along the entire toe of each stockpile.
5. Each stockpile shall not exceed 100 cubic yards and shall be located away from drainage features, surface waters, and stormwater drainage paths. Or, the soils

can be placed in watertight containers, such as 20-yard steel roll-off bins, drums, etc. These containers shall be covered.

6. The Contractor shall have representative soil samples taken from each stockpile (Pile No. 1, 2, and 3) and tested in accordance with HDOH guidelines, standards, and regulations, such that the soil sample report, prepared by the Contractor's Qualified Environmental Professional, can specifically state one of the following:
 - a. "The soil is not a regulated hazardous waste and is acceptable for disposal at a HDOH permitted facility."; or
 - b. "The soil is acceptable for unrestricted reuse."

Sampling and testing of the stockpiles shall be, at a minimum, in accordance to the latest edition of the HDOH's *Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material*. The Contractor's Qualified Environmental Professional shall direct the soil sampling collection and testing methods in accordance with the most current guidelines. Stockpiles shall be tested using multi-increment (MI) sampling approaches. Appropriate decision unit (DU) volumes for larger stockpiles of soil should be discussed with the HDOH HEER Office on a case-by-case basis.

The Contractor shall also confirm, with the HDOH permitted facility, the facility's sampling requirements, as well as their standards for disposal.

7. Any liquid-phase oil or free product associated with the contaminated soil shall be drained prior to stockpiling. If feasible, the free product should be separated from the soil, properly stored, profiled, and disposed of at an approved recycling/disposal facility.
8. For any soils hauled off Airport property, the Contractor shall be responsible for the legal disposal of any soil. The Contractor shall implement and maintain the following:
 - a. A form, signed by the Contractor and haul truck driver. The form shall contain the following information:
 - i. The date the material is being taken off Airport property.
 - ii. The name of the haul trucking company.
 - iii. The haul truck number and license plate number.
 - iv. The quantity of material being loaded into the haul truck.
 - v. The disposal facility or location of where the material is to be taken.
 - vi. The time the truck left the project site.
 - b. The form and waste manifest from the HDOH permitted facility shall be provided to the Engineer or its representative by the close of the next working day. The Contractor shall verify that the quantity of material loaded into the truck, as indicated on the form, exactly matches the quantity of material disposed at the HDOH permitted facility, as indicated on the waste manifest.

- c. The Contractor shall maintain a log that summarizes each form and waste manifest for ease of tracking and monitoring.
 - d. **All forms, waste manifest, and summary log shall be a condition of payment being made to the contractor and shall be submitted with each progress payment. Failure to submit the above and/or should any quantity of material loaded into the truck, as indicated on the form, not exactly match the quantity of material disposed at the HPQH permitted facility, as indicated on the waste manifest, shall be reason for the State to withhold payment to the Contractor.**
9. Excavated soils can be reused onsite (within the construction site boundaries) with the prior approval of the DOTA AIR-EE, HDOH HEER Office, and subject to the following conditions:
- a. Representative soil samples have been taken and tested in accordance with HDOH standards and regulations.
 - b. The contaminated soil can only be reused within proximity of its original excavation.
 - c. The contaminated soil is placed within areas more than 150 meters from surface water and drainage features.
 - d. The contaminated soil cannot be placed beneath or within the footprint of a planned building structure.
 - e. The contaminated soil can only be placed at an elevation above the tidally influenced high water table and at least 1-foot below the finish surface grade. The more highly impacted soil should be placed at the bottom of the excavation and the cleanest soil at the top of the excavation. At least 1-foot of clean soil must be placed as the final backfill layer at the top. The excavation shall then be capped with an impervious layer, such as concrete and asphalt.
 - f. The contaminated soil cannot contain any free oil, oil sheens, oil stains, or total petroleum hydrocarbon (TPH) concentrations exceeding 5,000 parts per million (ppm).
 - g. The contaminated soil is not considered a hazardous waste pursuant to Federal and State laws.
 - h. Contaminated soil shall not be reused in areas that are uncontaminated.
10. Excavated soils can be reused offsite (off Airports property) with the prior approval of the DOTA AIR-EE, HDOH HEER Office, and subject to the following conditions:
- a. Representative soil samples have been taken and tested in accordance with HDOH standards and regulations.

- b. The work shall be performed in accordance to the latest edition of the HDOH's *Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material*.
 - c. A signed agreement with the receiving facility acknowledging the test results of the soil samples and acceptance of the soil is required to be submitted to the DOTA Engineer and DOTA AIR-EE ten (10) calendar days prior to hauling of the soil to the receiving facility.
 - d. The contaminated soil shall not contain any free oil, oil sheens, oil stains, or total petroleum hydrocarbon (TPH) concentrations exceeding 5,000 parts per million (ppm).
 - e. The contaminated soil is not considered a hazardous waste pursuant to Federal and State laws.
11. All soil that is reused onsite or offsite shall be included in the Closeout Report. The report shall include, at a minimum, a copy of the signed agreement from the receiving facility accepting the soil, a copy of the soil test results, the quantity of soil received by the facility, a location map of the reused soil including GPS coordinates of its limits, the depth and thickness of the soil's placement, a brief description of the purpose of the soil's re-use, and photos of the site conditions after placement has been completed.

B. GROUNDWATER MANAGEMENT

Soil and groundwater may be impacted by petroleum hydrocarbons, dissolved metals, and/or pesticides, and may be encountered during soil excavation.

- 1. The disturbance of contaminated groundwater shall be performed in accordance with the approved Work Plan, DOTA EHE-EHMP, or Site-Specific EHMP, where applicable. HDOH HEER Office will determine whether additional sampling is required.
- 2. If contaminated groundwater is uncovered at a previously unknown source or site on the project, the Contractor shall immediately notify the DOTA Engineer, DOTA AIR-EE, and HDOH HEER Office of its discovery. Provide a location map with GPS coordinates and approximate depth of the groundwater (bgs) at which the discovery was encountered.
- 3. During excavation and disturbance of impacted groundwater, all workers, supervisory personnel, subcontractors and consultants must take precautionary measures as necessary to prevent exposure of the workers and the general public to COCs and inhalation of associated vapors. Free product, sheen, and impacted groundwater must be managed properly.
- 4. Groundwater that exhibits evidence of possible contamination, i.e., odor, visual sheen, free product, coloration, and PIO measurement, shall be properly stored when removed from the ground. Storage devices shall be watertight and leak-free to prevent discharge of the water into the surrounding ground, drainage system, and surface waters.

When disconnecting pipes and hoses from storage devices and equipment, residual waters contained in the pipes and hoses shall also be prevented from discharging into the surrounding ground, drainage system, and surface waters.

5. Representative water samples shall be taken and tested in accordance with Federal and State guidelines, standards, and regulations.
6. If free product is present in the extracted groundwater, it must be separated from the groundwater, profiled, and disposed of at an HDOH approved recycling/disposal facility. Free product shall not be moved from one excavation to another. Engineering measures shall be taken to prevent the transfer of the free product during dewatering. Under no circumstances shall water contaminated with free product be discharged from a dewatering pit.
7. At least once daily, remove oil observed floating on the groundwater during excavation activities using a vacuum truck, absorbent pad, or other methods approved by HDOH HEER Office. Excavations shall not be backfilled until the floating oil is removed to the maximum extent practicable, which is when further use of vacuum trucks, absorbent pads, or other approved methods do not result in further floating oil removal. Backfilling of any excavation shall not occur without concurrence from DOTA AIR-EE and HDOH HEER Office.
8. Avoid any releases of contaminated groundwater to surface water bodies or areas beyond the work area.
9. Groundwater shall only be re-infiltrated in the ground with the prior approval of DOTA AIR-EE and HDOH HEER Office, and subject to the following conditions:
 - a. Within 200-feet of its original location or source and returned to the same aquifer which is not a current or potential drinking water source. Re-infiltration shall not contaminate uncontaminated areas.
 - b. More than 150 meters from surface waters, drainage features, and drainage structures.
 - c. Groundwater does not contain any gross contaminants.
 - d. If petroleum free product is present in the groundwater, the free product shall be removed prior to transfer of the groundwater to the re-infiltration site. Free product shall be removed at least once daily until no free product is observed after 24 hours. The free product shall be disposed at an HDOH-approved facility.
 - e. Groundwater is not considered a hazardous waste pursuant to Federal and State law.
 - f. Re-infiltration shall be conducted at a slow enough rate so that it does not flow past the designated infiltration area, enter storm drains, or impact surface water in the area.
 - g. If discharging to a re-infiltration trench, the trench must not be an

underground injection control (UIC) well by HDOH's Safe Drinking Water Branch (SOWS) definitions. If some part of the trench system is deemed to be a UIC well, then the whole system shall be considered an injection well.

- h. Advance clearance from HDOH SOWS is required if a re-infiltration trench is deeper than 10 feet.
 - i. If a UIC well is used for re-infiltration, the Contractor is responsible to obtain the necessary permits, including, but not limited to, HDOH's UIC Permit. The Contractor shall meet and comply with all permit requirements, including, but not limited to, well construction, placement, use, and closure.
10. Under circumstances where contaminated groundwater cannot be re-infiltrated, proper disposal must be conducted with the prior approval of the DOTA AIR-EE, HDOH SOWS, HDOH Solid and Hazardous Waste Branch (SHWB), and HDOH HEER Office. This is also subject to the following conditions:
- a. Discharge to the local or municipal sanitary sewer system after acquiring appropriate permit(s) from City and County (if applicable and if allowable by the receiving governmental agency) prior to discharge. If discharge water was generated within contaminated areas, additional coordination with HDOH HEER Office is required, and Aquatic Habitat Criteria (Chronic Toxicity) shall apply to discharge within these areas, in addition to any criteria applicable to the National Pollutant Discharge Elimination System (NPDES) permit or pretreatment facility. Water discharged to a sanitary sewer may be required to meet Water Quality Standards.
 - b. Notification to the appropriate agencies and other pertinent information related to the discharge must be provided upon request.
 - c. The Contractor is responsible for the legal disposal or discharge of any groundwater that is not re-infiltrated, and shall provide the DOTA AIR-EE with copies of waste manifests.
 - d. For any groundwater hauled off Airport property, the Contractor shall have representative samples taken and tested in accordance with HDOH guidelines, standards, and regulations. A copy of the groundwater test result shall be submitted to DOTA AIR-EE. The groundwater shall not be disposed offsite without the approval of DOTA AIR-EE and the HDOH permitted facility that is receiving the groundwater. Furnish documentation from the receiving facility indicating that they acknowledge the groundwater test results, including their approval to dispose the groundwater at their facility.

C. RELEASE REPORTING

Encountering previously unknown, suspected, or confirmed contaminated soil or groundwater during subsurface construction activities is considered a release and shall be reported to HDOH HEER Office (phone: 808-586-4249, or after hours at 808-236-8200). Copies of the HDOH Release Report, HDOH issued Release Number, and email correspondence (if applicable), shall be furnished to the DOTA Engineer

and DOTA AIR-EE.

1. Upon the discovery of contaminated soil and/or groundwater, the Contractor shall immediately notify the DOTA Engineer, DOTA AIR-EE, and HDOH HEER Office.
2. A reportable release of hazardous substances or contaminated soil or groundwater may be indicated by, but not limited to, any of the following:
 - A petroleum sheen on the groundwater in an excavation.
 - Any free product that appears on groundwater.
 - Visual or olfactory evidence of contamination (e.g., unusual discoloration, buried containers, fumes, unknown liquids).
3. Comply with DOTA and HDOH HEER Office requirements. A written report shall be provided to the HDOH HEER Office. The *Hawaii Hazardous Substance Written Follow-up Notification Form* is provided in the DOTA EHE-EHMP, Appendix B.1. Photos shall be included to document the incident. The Contractor shall keep a copy of the completed Form B.1 and provide copies of the written report to the DOTA Engineer and DOTA AIR-EE.
4. If free product is encountered, report the release in accordance with HAR § 11-451.

Releases that occur during construction activities or releases due to unforeseen events (spill) shall also be reported.

1. Report all spills to immediately to AIR-EE, State Engineer, and appropriate airport personnel and regulatory agencies (if applicable) following the DOTA Spill Reporting Fact Sheets for each airport. Spill Reporting Fact Sheets can be found on DOTA's Environmental Webpage for Construction site Runoff at https://hidot.hawaii.gov/airports/doing-business/engineering/environmental/construction-site-runoff-control-prog_ram/.
2. In the event of a release of a hazardous substance that causes an imminent threat to human health or the environment, the first call shall be to 911.
3. Small spills of petroleum or hazardous substances (less than 25 gallons) which are capable of being cleaned up within 72 hours and do not threaten ground or surface waters shall be cleaned up immediately.
4. Report spills of a certain size (e.g., volume of greater than 25 gallons or not contained within 72 hours), per HAR§ 11-451, to HDOH HEER Office and the National Response Center immediately. Comply with the HDOH HEER Office requirements. A written report shall be provided to the HDOH HEER Office within 30 calendar days of a Reportable Quantity spill cleanup. The *Hawaii Hazardous Substance Written Follow-up Notification Form* is provided in the DOTA EHE-EHfyp, Appendix B.1. Photos shall be included to document the incident. The Contractor shall keep a copy of the completed Form B.1, and provide copies of the written report, the HDOH issued Release Number, and email correspondence (if applicable) to the DOTA Engineer and DOTAAIR-EE.
5. Any spill that enters a body of water, onto an adjoining shoreline, or discharges

into the storm drain system, HOOH CWB must also be immediately notified and the National Response Center notified within 24 hours. Report significant spills to the U.S. Coast Guard.

D. FINAL CLEANUP

1. When work which disturbs contaminated soil has been completed, the State will visually inspect the work area for evidence of contaminated materials and direct the Contractor to clean and remove remaining contaminated materials. The Contractor shall not dismantle the work area boundaries prior to authorization by the State.
2. Any equipment which contacts contaminated materials shall be cleaned with a water spray immediately upon completion of work. The wash location shall be located immediately adjacent to the contaminated area. All wash water and solid waste shall be disposed of in accordance with the Work Plan. The wash water shall not be allowed to discharge into the drainage system and surface waters.

E. AIR MONITORING

1. Air monitoring shall be conducted when petroleum-contaminated soil (PCS), contaminated groundwater, free product, or chlorinated solvents (e.g., PCE, TCE, etc.) is present in an excavated area. The monitoring shall include both work area and perimeter measurements of volatile organic compound (VOC) vapors. Appropriate response actions shall be taken in conformance to Federal and State regulatory requirements and guidelines. The response actions shall include ensuring that on-site workers have the appropriate level of PPE and the general public is not affected adversely.
2. Air monitoring shall be conducted with a conventional photoionization detector (PIO) to measure total VOC vapor concentrations. If high levels of benzene are anticipated, an Ultra-Rae PIO, which is benzene-specific, shall also be used.
3. If toxic gases are a potential concern, air monitoring of the lower explosive limit (LEL) shall be conducted using a multi-gas meter to determine if a hazardous atmosphere exists.
4. Air monitoring shall be conducted for at least three (3) full 8-hour shifts to establish a negative exposure assessment for worker's exposure to airborne contaminants. After the establishment of the negative worker's exposure, periodic monitoring shall be conducted once every seven (7) calendar days to document worker exposure for the duration of the contaminated soil work.
5. Work area and perimeter air monitoring shall be conducted throughout the entire duration of the contaminated soil work to ensure unprotected personnel are not exposed above permissible exposure limits at all times. If the outside boundary levels are at or exceed permissible exposure limits, work shall be stopped, and the Contractor's Qualified Environmental Professional and OOTA Engineer shall be immediately contacted to address the situation causing the increased levels.
6. Submit air sampling results to the OOTA Engineer within five (5) calendar days after the samples are collected, signed by the testing laboratory employee

performing the air monitoring.

F. UNDERGROUND STORAGE TANKS (UST) AND UTILITY PIPES

1. For any UST or pipeline discovered or planned removal, the nature of the UST or pipeline, and whether they are inactive, shall be determined prior to removal. Immediately notify the DOTA Engineer and DOTA AIR-EE of the discovery.

If unanticipated petroleum pipelines are discovered, contact HDOH HEER Office within 24 hours after encountering them.

2. The Contractor shall record field observations of the UST and pipelines. These observations shall include, but are not limited to, the following:
 - a. Location relative to fixed landmarks, including GPS coordinates. Provide a location map that shows the UST and pipelines that were encountered. The map must include a North arrow and a scale.
 - b. Depth, diameter, length, and type of pipe, if applicable. Describe the condition of the pipe.
 - c. Type of fuel or product, including analytical laboratory reports for the product that is recovered.
 - d. Beginning and ending fluid levels, if applicable.
 - e. Volume of each type of product removed.
 - f. Flow rates, if applicable.
 - g. Direction of flow.
 - h. Detailed photographs.
 - i. Detailed description of actions taken following the discovery, such as, cutting, product removal, and disposal.

Provide records of the field observations to the DOTA Engineer, DOTA AIR-EE, and HDOH HEER Office.

3. Prior to removal of a UST, the Contractor shall prepare and submit to the DOTA Engineer, for review by DOTA AIR-EE, a Site-Specific plan. All work associated with USTs shall be in compliance with HAR§ 11-280.1 requirements, and HDOH HEER Office and HDOH SHWB requirements.

The contractor shall also complete the HDOH *Notice of Intent to Close Underground Storage Tanks* form and submit it to the DOTA Engineer for submission to HDOH SHWB (UST Section) by DOTA AIR-EE.

Prior to the removal of the UST, the Contractor shall receive approval from DOTA AIR-EE and HDOH HEER Office.

4. The UST or pipeline segment must be drained of its content or determined that it is empty of liquids or flammable vapors prior to the removal. Any petroleum fluids recovered must be representatively sampled and tested to determine how they can be recycled or disposed in full accordance with HAR § 11-58.1 and § 11-260-279, and any other Federal and State regulations.
5. Only personnel knowledgeable and trained in pipeline and UST removal shall cut, drain, and remove USTs and pipelines. Prior to cutting, plastic sheeting and absorbent material shall be placed below and adjacent to the cutting location. Any residual fluid in the UST or pipeline must be properly contained on the sheeting and prevented from discharging into the surrounding soil or entering any drainage system and surface waters.
6. The cut-off ends of the pipeline segments, that remain in-place, must be filled with concrete and appropriately sealed to prevent any potential leakage and contact with groundwater.
7. If the waste pipe or UST are to be stored onsite prior to disposal, the area shall be lined with polyethylene plastic sheeting, 10 mil or thicker, and bermed to contain any free product. Some viscous products may appear to be immobile, however, after exposed to atmosphere heating, can liquefy. The waste pipe segment shall be stored on appropriate dunnage with the ends of the pipe sealed or covered to protect the interior of the pipe from contact with rainwater and wind.
8. All removed pipelines and USTs shall be properly disposed or recycled.
9. For USTs, a UST Removal Report including all sampling activities required under HAR§ 11-280.1 shall be prepared and submitted to the DOTA Engineer, DOTA AIR-EE, and HDOH SHWB (UST Section).

3.4 POST-CONSTRUCTION REQUIREMENTS

A. Submit the following within 30 calendar days after work is completed.

1. Close-out Report
 - a. A signed certificate stating that the removal and disposal of all contaminated materials were completed in accordance with the Contractor's approved Work Plan or C-EHMP Addendum, and all applicable Federal, State, and local rules and regulations.
 - b. All approved DOTA EHE-EHMP deviation request forms. (Reference Appendix B of the DOTA EHE-EHMP.)
 - c. All Site-Specific EHMP, if applicable.
 - d. All testing, laboratory results, and reports for any soil, groundwater, soil vapor, UST, pipeline, and other samplings taken.
 - e. All disposal forms, waste manifests, and summary logs.

- f. Any results from project air monitoring.
- g. Record of Field Observations, including location map with GPS coordinates, limits, and depths of any contaminated media (soil, groundwater, etc.) that were encountered at previously unknown source or sites on the project. Include a copy of the completed *Hawaii Hazardous Substance Written Follow-up Notification* form that was submitted to HDOH and all other associated documents.
- h. If any contaminated soil was removed offsite (off of Airport Property), at a minimum, include the following:
 - A copy of the signed agreement from the receiving facility acknowledging the test result of the soil samples and indicating acceptance of the soil for reuse.
 - Copies of the test results of the soil sampling.
- i. If any contaminated soil was re-used onsite (within the construction site boundaries), at a minimum, include the following:
 - Copies of the test results of the soil sampling.
 - The quantity of soil that is re-used on-site.
 - Location map of the re-used soil. Include GPS coordinates of its limits, if the area is accessible.
 - A brief description of the purpose of the re-used soil (e.g., general fill, utility trench backfill material, etc.). Include the depth and thickness of its placement.
 - Photos of the site after placement of the re-use soil has been completed.
- j. Record of Field Observation of any unanticipated UST or pipeline discovered during construction activities, including a copy of the completed HDOH *Notice of Intent to Close Underground Storage Tanks* form and all other associated documents.

The Close-out Report shall be by each individual contaminated media and shall include all appropriate documentations. The Close-out Reports for each contaminated media can be submitted separately or combined in a 3-ring binder with divider tabs.

PART 4 - MEASUREMENT AND PAYMENT

4.1 BASIS OF MEASUREMENT AND PAYMENT

Work under this Section will be paid for under the various contract items as shown below.

For ALLOWANCE items in the Proposal Schedule, the allowance is an estimate and the amount shall not exceed the maximum amount shown in the Proposal Schedule. Payment shall be the actual cost as invoiced by the Contractor and approved by the DOTA Engineer. The Contractor shall be allowed to include overhead, profit, insurance and/or other mark-ups, as stipulated in Section 9.5 of the 2016 General Provisions for Construction Projects, Air and Water Transportation Facilities Divisions.

<u>Item No.</u>		<u>Unit</u>
01562.1	Management of Contaminated Medias	Allowance

Should the DOTA receive reports of any illegal dumping of material, and if illegal dumping is confirmed to have occurred, the DOTA will assess a Liquidated Damage amount of \$5,000 per truck per day, until the illegal dumped material has been cleaned up or the incident has been remedied to the HDOH's concurrence. The Contractor shall not be entitled to recover any Liquidated Damages assessed, even after the non-compliance has been corrected.

The Contractor shall also be responsible for all citations, fines, and penalties levied by HDOH or EPA against the State due to the Contractor's failure to properly manage contaminated medias, including non-compliance with the DOTA EHE-EHMP, DOTA Site-Specific EHMP, or C-EHMP Addendum. The Contractor shall reimburse the State within 30 calendar days for the full amount of outstanding cost that the State has incurred, or the State shall deduct all incurred costs from the Contractor's monthly progress payments.

If the Contractor fails to satisfactorily address the non-compliance item, DOTA reserves the right to employ outside assistance or use the State's own labor forces to provide necessary corrective measures. The Contractor shall be fully responsible for all cost and time. The State shall charge the Contractor such incurred costs plus any associated project engineering costs and shall make appropriate deductions from the Contractor's monthly progress payment.

END OF SECTION

SECTION 01565 - SECURITY MEASURES

PART I – GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provision of the Contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this Section

1.02 DESCRIPTION

- A. The Contractor shall incorporate the State's airport security measures as part of his work. The Contractor shall adhere to established and enhanced security procedures, as mandated by the State and FAA, throughout the course of this Contract.

1.03 SUBMITTALS

- A. Submit a security plan that addresses the conditions set forth in this Contract. Said plan shall contain, at a minimum, a plan of the project scope with locations of construction barricades with secured entry/exits, identification of locations requiring guards, Contractor measures to ensure security of worksite and personnel and procedures to ensure the containment of the worksite from unauthorized personnel. This package shall be submitted within fourteen (14) calendar days after award of the Contract.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 SECURITY

- A. Obtain airport security identification badges for all employees working on this project and Air Operations Area (AOA) decals for all vehicles entering the AOA area in accordance to the requirements stated in the Special Provisions, Paragraph 8.21. All requests for badges and AOA decals shall be submitted in writing to the Airport District Manager through the Engineer within fourteen (14) calendar days after award of the Contract. Only authorized personnel working on this project shall be allowed to obtain badges. The Contractor shall be responsible to pay for all costs associated with complying with airport security requirements, including obtaining airport security identification badges.

As of the writing of this specification, the fees to obtain a new airport identification badge are \$10.00 for processing and \$60.00 for fingerprinting. However, due to the changing fee structure of these services, the Contractor shall inquire with the Daniel K. Inouye International Airport AOA badge and ramp license office at (808) 836-6427. For other Airport Districts cost inquiries should be made the relevant Air District Office:

Ellison Onizuka Kona International Airport at Keahole	(808) 327-9517
Hilo International Airport	(808) 961-9350
Kahului, Kapalua, Hana, Molokai, Kalaupapa, & Lanai Airports	(808) 872-3874
Lihue & Port Allen Airports	(808) 271-3902

If access is required to the Daniel K. Inouye International Airport - International Arrivals Building, inquiries shall be made to the Bureau of Customs and Border Patrol at (808) 861-8642 for additional bonding requirements.

- B. The Contractor shall comply with all existing and proposed airport security initiative requirements. Contractor may be subject to civil penalties up to \$35,000.00 for each security violation.
- C. The Contractor shall protect work areas from theft, vandalism and unauthorized entry. Ensure that proper methods are undertaken to secure tools, materials and equipment from the public.
- D. All vehicles entering the AOA through any of the Airport Access Check Points may be subject to search. The Contractor shall allow extra time for these inspections and be able to provide personnel, as required, to assist Airport security personnel during the inspections.
- E. If required by the State, the Contractor will be responsible for the posting of guards at access points where the construction traffic may compromise the integrity of the airport security. Payment for posting of security guards required by the State shall be paid for as an allowance item in the Proposal Schedule. The Contractor shall submit the name and qualifications of the security company to the Engineer for review prior to hiring the security company. The security company shall have extensive experience in working on airports and knowledgeable in airport security procedures within the State of Hawaii.

PART 4 - MEASUREMENT AND PAYMENT

4.01 METHOD OF MEASUREMENT

- A. No measurement shall be made for the items in this Section.

4.02 BASIS OF PAYMENT

- A. Work under this Section, except for posting of security guards and the provision of security measures required by the State, shall be considered incidental to and included in the bid prices for the various items of work in this project. AOA badges, decals, and fines are not eligible for reimbursement.
- B. Posting of security guards or other security measures required by the State shall be paid for under an allowance item in the Proposal Schedule. The allowance is an estimate and the amount shall not exceed the maximum amount shown in the proposal schedule. Additional charges by the Contractor for overhead, coordination, profit, insurances and other incidental expenses shall not be allowed. These shall be included in the Contractor's lump sum bid price.
- C. Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
01565.1	Security Measures	Allowance (ALLOW)

END OF SECTION

SECTION 01580 - TEMPORARY FACILITIES AND UTILITIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provision of the contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this section.

1.02 DESCRIPTION

- A. This item shall consist of arranging and maintaining all utilities including, but not limited to, water, electricity, sewage disposal and telephone communications in the work area which the Contractor and Engineer deems necessary to meet the requirements of the work under the contract.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 TEMPORARY UTILITIES DURING CONSTRUCTION

- A. Water and Sanitation: The Contractor shall provide temporary drinking water and sanitary facilities for the field personnel. The facilities shall be in accordance with the applicable health regulations and shall be maintained clean and operable until the conclusion of the construction work.
- B. Telephone: The Contractor shall have a telephone available for the State's use for communications with field personnel. Cellular telephones are acceptable. The Contractor shall install the telephone immediately upon starting work and maintain service until the project is completed. All costs associated with obtaining and maintaining telephone service shall be borne by the Contractor.
- C. Electricity: Contractor shall obtain or provide temporary electric power and shall pay for all connections and energy charges incurred during construction.
- D. Metering: Water and electrical services shall be metered and payment for meters and services shall be borne by the Contractor. Temporary connections for water shall include installation of a meter and backflow preventer at the point of connection according to State standards at the Contractor's cost. The Contractor shall submit requests for temporary connections in writing to the Engineer fourteen (14) calendar days prior to the connection and shall include a description of work and a sketch of the proposed installation.

PART 4 - PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

- A. Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the prices bid for the various items of work in this project.

END OF SECTION

SECTION 01581 - PROJECT IDENTIFICATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provisions of the Contract, including General and Special Provisions and General Requirements of the Specifications shall apply to the work specified in this section.

1.02 DESCRIPTION OF WORK

- A. The work covered by this Section consists of fabrication and erection of one finished project sign in accordance with the project sign details and specifications contained herein.

1.03 SUBMITTALS

- A. Submit six (6) copies of the project sign layout to the Engineer for review prior to fabrication of sign. Sign layout shall be submitted within thirty (30) calendar days after the Notice to Proceed date.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Plywood - 3/4" thick exterior grade high density overlay with resin-bonded surfaces on both sides.
- B. Lumber for frames, braces and supports - S4S construction grade, Douglas Fir, as required.
- C. Paints and Inks - Screen print inks are matte finish. Paints are satin finish, exterior grade, one (1) prime coat and two (2) finish coats minimum all sides and edges.

2.02 SPECIFICATIONS

- A. Lettering: Shall be set in Helvetica Compact Bold. If this specific type is not available, Futura Demi Bold may be substituted. Other letters are set as shown in Helvetica Medium with the exception of the initial capitals of the Governor which is set in Baskerville. Copy should be set and spaced by a professional typesetter and enlarged photographically for photo stencil screen process.
 - 1. Artwork: Constant elements of the sign layout-frame, stripe, and official State information may be duplicated following working drawing measurements as specified in the drawings. The "STATE OF HAWAII" masthead letters shall be Baskerville Bold as indicated on the drawing layout.

2. Title: The specific major work of the project under construction is emphasized by using type in all capitals. Other related information of lesser importance use type in initial caps and lower case letters.
3. Materials: Panel is 3/4" exterior grade high density overlaid plywood, with resin bonded surfaces on both sides.
4. Paints and Inks: Screen print inks are matte finish. Paints are satin finish, exterior grade. References to Ameritone color key paint are for color match only.
5. Color:
 - a. IBL10A Bohemian Blue
 - b. 2H16P Softly (White)
 - c. 2VR2A Hot Tango (Red)
 - d. 1M52E Tokay (Gray)

PART 3 - EXECUTION

3.01 TITLES

- A. Constant elements of the sign layout (frame, outline, stripe, and official state information) may be duplicated following working drawing measurements, or be reproduced and enlarged photographically using a layout template if provided. The "STATE OF HAWAII" master head should be reproduced and enlarged as specified, using the artwork provided.
- B. The specific major work of the project under construction is emphasized by using 3-3/4" type, all capitals. Secondary information such as locations or buildings uses 2-1/4" type, all capitals. Other related information of lesser importance uses 1-1/2" (capital height) type in lower case letters. All lines of type should not exceed the width of the 6'-2" stripe. Design shall follow the layout shown in the Contract drawings.

3.02 INSTALLATION

- A. Locations of all signs shall be as directed by the Engineer. Mounting shall be secure and in a presentable manner.
- B. The project sign shall be erected within five (5) calendar days after the Notice to Proceed date. The sign shall be installed only after the submittal is approved.

3.03 MAINTENANCE

- A. Contractor shall maintain all signs and keep them legible and in good repair at their own expense for the entire construction period.
- B. After the final approval of the construction work by the State, the project sign shall be removed from the site and shall become the property of the Contractor.

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

- A. Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the bid prices for the various items of work in this project.

END OF SECTION

SECTION 01700 – MOBILIZATION AND DEMOBILIZATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provision of the contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this Section.

1.02 GENERAL REQUIREMENTS

- A. Section 699 of "Hawaii Standard Specifications for Road, Bridge, and Public Works Construction, 1994," are hereby incorporated into and made a part of these specifications by reference unless otherwise modified hereinafter.

1.03 MOBILIZATION

- A. The Contractor shall mobilize and transport his construction plant and equipment including materials and supplies for operation to the site of work, construct temporary buildings and facilities as necessary, and assemble the equipment at the site as soon as possible after receipt of Notice to Proceed, subject to the provisions of the General Provisions.

1.04 DEMOBILIZATION

- A. The Contractor shall demobilize and transport his construction plant and equipment including materials, supplies and temporary buildings off the site as soon as possible after construction is completed. Demobilization shall include all cleanup required under this contract and as directed by the Engineer. Demobilization and final cleanup shall be completed prior to final acceptance.

1.05 PERFORMANCE BOND

- A. The Contractor shall file and pay for the performance and payment bonds according to Section 2.24 of the General Provisions, except that the value of the bonds shall equal one hundred percent (100%) of the amount of the contract basic bid amount plus one hundred percent (100%) of the amount of the extra work.
- B. Payment for the Contractor's bond premium will be made as part of mobilization in accordance to the terms stated in Part 4 below.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

PART 4 - MEASUREMENT AND PAYMENT

4.01 METHOD OF MEASUREMENT

- A. Mobilization shall not be measured for payment. The maximum bid allowed for "Mobilization" is an amount not to exceed six (6) percent of the sum of all items (excluding this item and all Allowances). If the proposal submitted by the bidder indicates an amount in excess of the allowable maximum, the indicated amount or amounts shall be reduced to the allowable maximum; the "Total Amount for Comparison of Bids," in the proposal schedule shall be adjusted to reflect any such reduction. For the purposes of comparing bids and determining the contract price to be inserted in the contract awarded to the bidder, if any is so awarded, the "Total Amount for Comparison of Bids" adjusted in accordance with the foregoing shall be used and the bidder's proposal shall be deemed to have been submitted for the amounts as reduced and adjusted in accordance herewith."
- B. Demobilization will not be measured for payment.

4.02 BASIS OF PAYMENT

- A. Mobilization will be paid for at the contract lump sum price under Mobilization. Partial payment will be made as follows:
 - 1. When 2 1/2 percent of the original contract amount is earned, 50 percent of the bid amount will be paid.
 - 2. When 5 percent of the original contract amount is earned, 75 percent of the bid amount will be paid.
 - 3. When 10 percent of the original contract amount is earned, 100 percent of the bid amount will be paid.
 - 4. Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the contract.
- B. Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>
01700.1	Mobilization (Not to exceed 6% of sum of all items, excluding this item, all allowances and force account items)	Lump Sum (LS)

END OF SECTION

SECTION 01800 – SPECIAL REQUIREMENTS FOR CONTRACTORS ON THE AOA

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provisions of the Contract, including General and Special Provisions and General Requirements of the Specifications shall apply to the work specified in this section.

1.02 DESCRIPTION OF WORK

- A. Provide all materials, labor, equipment, and tools necessary to complete the Special Requirements for Contractors on the Air Operations Area (AOA).
- B. The requirements of the Section are essential for ensuring public and worker safety on this project; hence, the Contractor shall comply with all requirements of this section when performing work on the AOA. Should the Contractor fail to comply with any requirement of this section; work may be delayed or temporarily suspended without contract time extensions. Liquidated damages or fines may result. All liquidated damages or fines resulting from violations due to improper activity, inattention, or failure to comply with required airport procedures; shall be borne by the Contractor.

1.03 PROJECT LIMITATIONS

- A. The project normal working hours shall refer to SECTION 01000 – DESCRIPTION OF WORK. The Contractor shall work continuously during the project duration. No work shall be performed during State Holidays or when weather conditions restrict construction from occurring.

1.04 AOA SECURITY REQUIREMENTS

- A. AOA Access Points: The Contractor will be assigned only one access point for each work phase, and shall ensure that all of their personnel, vehicles, and equipment enter and exit the AOA only through the assigned access point.

All vehicles entering the AOA through any of the Airport Access Check Points may be subject to search. The Contractor shall allow extra time for these inspections and be able to provide personnel, as required, to assist Airport security personnel during the inspection.

If the State deems an emergency situation has rendered the assigned access point unusable the Contractor will be assigned a temporary access point for the remaining workday. Should the original assigned access point remain unusable for a prolonged period, the Contractor will be assigned a new access point the following day and shall be responsible for all requirements at the new assigned access point.

- B. The Contractor shall comply with all existing and proposed airport security initiative requirements. Contractor may be subject to civil penalties up to \$35,000.00 for each security violation.
- C. The Contractor shall protect work areas from theft, vandalism and unauthorized entry. Ensure that proper methods are undertaken to secure tools, materials and equipment from the public.
- D. AOA Access Gates: Should the Contractor's assigned AOA access point be through an unguarded gate, the Contractor shall be responsible for the following:
 - 1. Obtain the AOA access gate key(s) from the Airport Security Office (a \$500.00 deposit is required per key).
 - 2. Provide all gate guards required. Each gate guard shall possess the following expertise:
 - a. Familiarity with all of the AOA security access clearance requirements.
 - b. Knowledge related to AOA access badge, AOA vehicle decal, and airport vehicle operator requirements.
 - c. A communication device and specific instructions to call for assistance whenever problems occur.
 - 3. Proper control of the AOA access gate in accordance with all required airport security procedures.
 - 4. Close the AOA access gate during prolonged periods of inactivity; and close and lock whenever the AOA access gate is not in use, or is unattended.

1.05 AOA OPERATIONAL SAFETY REQUIREMENTS

- A. It is the explicit intent of this contract that the safety of aircraft, and all of the personnel and equipment under the Contractor's jurisdiction, be the highest priority; hence, the Contractor shall carefully plan the operations of all personnel and equipment under their jurisdiction to provide for the free and unobstructed movement of all aircraft on the AOA, and to provide for the uninterrupted operation of visual and electronic signals used to guide aircraft while all personnel and equipment under their jurisdiction traverses the AOA.
- B. With the exception of actual construction methods, the Federal Aviation Administration (FAA), Airport Traffic Control Tower (ATCT) will have full authority to control the Contractor's movements within the existing movement area. If the FAA, ATCT notifies the Contractor to temporarily halt operations, the Contractor shall effectively notify all personnel and equipment under its jurisdiction, without using lighted flares, to cease all work and move all equipment and themselves away from hazardous areas.
- C. The Contractor is responsible for all of their movements on the AOA. Should the State deem that an escort, flagman, or driver fails to perform their duties, that escort, flagman, or driver may be terminated, or suspended and required to undergo additional training.

- 1.06 AOA COMMUNICATION DEVICES: The Contractor shall have at least two (2) people on the AOA possessing and continuously monitoring the following fully charged communication devices:
- A. A two-way radio capable of communicating on frequencies 118.90 (Tower) and 121.90 (Ground); with a spare charged battery and
 - B. A cellular telephone, with a listing of all required emergency contact numbers.
- 1.07 AOA TRAVEL ROUTE: The Contractor will be assigned only one (1) travel route per work phase, and shall ensure that all of their personnel, vehicles, and equipment traverses the AOA only along the assigned travel route.

Should the State deem that an emergency situation has caused the assigned travel route to become unusable the Contractor will be assigned a temporary travel route for the duration needed and shall be responsible for all requirements associated with the new assigned travel route.

- 1.08 AOA AUTHORIZED VEHICLES: Only vehicles considered safe, and required to complete the contracted work will be allowed to operate on the AOA. Each vehicle operating on the AOA shall be authorized, possessing:
- A. An AOA vehicle decal obtained from the Airport Security Office and displayed on the driver's side front bumper (use of an AOA temporary vehicle permit is not allowed).
 - B. Insurance coverage as required by Article 7.1 of the General Provisions, and further amended by the Special Provisions.
- 1.09 VEHICLE AND EQUIPMENT REQUIREMENTS ON THE AOA: Each vehicle and driven piece of equipment shall possess the following when operating or staging on the AOA.
- A. Operations occurring at night, or during periods of poor visibility, shall require a Flashing Amber Beacon mounted atop each vehicle /equipment's highest point.
 - B. Daylight operations with clear visibility, shall require a Checkered Orange and White Flag attached to a staff that is mounted to each vehicle and/or equipment in lieu of a Flashing Amber Beacon. The flag shall be at least a three-foot square with a checker pattern of international orange and white squares that are at least one-foot on each side.
 - C. Two placards shall be on both sides of each vehicle or equipment at all times to identify the vehicle or equipment owner. Placards shall contain the company name in letters at least four-inches (4") tall, or six-inch (6") minimum-sized company logo.

- D. All additional equipment marking, lighting and positioning that may be required by the FAA.
- 1.10 AOA DRIVERS: All people operating a vehicle or any driven piece of equipment on the AOA shall possess the following license, permit and expertise:
- A. Current and valid Hawaii State Driver’s License.
 - B. Current and valid Airport Vehicle Operator’s Permit.
 - C. Complete Airport Familiarization.
 - D. An understanding and ability to identify the following:
 - 1. All RSA’s (Runway Safety Area), TWSA’s (Taxiway Safety Area).
 - 2. All AOA Markings, Lighting, and Signing.
 - 3. The Need for Control of DOD (Foreign Object Debris).
 - 4. All AOA Equipment for Aircraft.
 - 5. All AOA Critical Areas.
 - 6. All AOA Travel Routes for the Various Work Places.
 - E. An understanding and ability to follow all ground vehicle operation and communication requirements while operating on the AOA.
 - F. Successful completion of all AOA driver training require by the Airport Operations Manager.
- 1.11 AIRPORT VEHICLE OPERATOR’S PERMIT: Airport vehicle operator’s permit shall only be issued to people that apply through the Airport Security Office, and pass a written exam covering portions of the Airport Rules and Regulations related to vehicle operations on the AOA.
- 1.12 AOA ESCORTS: While operating on the AOA, the Contractor shall provide at least one escort for every five (5) vehicles and/or equipment under their jurisdiction. The Airport Operations Manager shall approve all escorts prior to any work commencing; hence, each escort shall possess:
- A. All AOA Driver Requirements.
 - B. Both AOA Communications Devices previously specified.
 - C. Knowledge about the assigned access points and travel routes for the project.
 - D. Successful completion of all AOA driver training required by the Airport Operations Manager. Each escort shall pass an exam given by the Airport Operations Manager, which demonstrates they possess an understanding and ability to follow all ground vehicle operation and communication requirements while operating on the AOA.

- 1.13 AOA TRAFFIC CONTROL: The Contractor shall furnish and provide the following traffic control devices to block off entrances of working area:
- A. Runway Lighted X's: Wherever working within an RSA.
 - B. Low-Profile Barricades: Low-profile barricades shall be any one of the following: however, if option a or b is selected, the Contractor shall be responsible for water filling and emptying these types of barricades as part of their contracted work.
 - 1. Neubert Aero Corporation's reusable Airport Low-Profile Barricade Model No. NAC-PC 2410 with at least one battery-powered red barricade light, or
 - 2. Multi-Barrier Safety Barricade Model No. AR-10x96 with at least one Multi-Barrier 360 degree solar-powered light, or
 - 3. Constructed barricades as indicated on plans.
 - 4. All Low-profile barricades shall be spaced fifteen (15) feet on center, and used as follows:
 - a. Restrict aircraft from taxiing into work areas: Barricades shall extend across the full TWY/RWY width, with one (1) barricade places on the TWY/RWY centerline.
 - b. Channel aircraft around work areas: Barricades shall be placed ten (10) feet away from active RSAs/TWSAs.
 - C. Reflective Cones: Reflective cones shall be used to demarcate AOA travel routes and locations where vehicles shall yield to aircraft.
- 1.14 AOA FOD CONTROL: The Contractor shall keep all work areas, AOA Travel Routes, and all adjacent areas clean at all times. Unless otherwise stated in this contract, or otherwise directed by the Airport Manager, the Contractor shall properly haul and dispose all removed pavement materials and collected debris to a site off the Airport. The State will require remedial cleaning from the Contractor whenever their FOD Control Operations are unsatisfactory. Upon receipt of notification, the Contractor shall be ready to start remedial cleaning at the jobsite within one-hour. Notification by telephone will be deemed as official.
- 1.15 AOA FLAG PERSONS: Should the plans require flag persons along the AOA Travel Route, each flag-person shall possess:
- A. AOA Driver as state in Sections 1.05.E.3, 1.05.E.4, and 1.05.E.6.
 - B. Both AOA Communication Devices previously specified in Section 105.A.
 - C. A traffic directing LED (Light-Emitting Diode) Light Baton.
 - D. A broom and dustpan to assist in AOA FOD Control.

1.16 AIRPORT STAGING AREAS: The Contractor shall only stage its vehicles and equipment at State approved areas. No vehicle or equipment shall park within four (4) feet of a security fence. Demarcation of the staging area shall be as follows:

- A. Weighted Lighted Barricades shall be placed around the staging area perimeter at a maximum of twenty feet (20') on center.
- B. Yellow Barrier Tape with the words "CAUTION DO NOT ENTER" continuously printed on the tape shall be used with barricades to demarcate the staging area perimeter.

1.17 COORDINATION OF CONSTRUCTION ON THE AOA

- A. Work on the AOA requires RWY and TWY closures that demand proper notification to numerous agencies responsible for public safety; thus, the Engineer shall receive the following sufficiently accurate information from the Contractor.
- B. Maximum height equipment: Equipment height shall be submitted to the State at least thirty-five (35) consecutive calendar days prior to construction. Construction shall not commence until the State receives confirmation from the FAA. All reported heights shall be the maximum heights among all vehicles or equipment used to complete the contracted work, and includes proper notification to the State whenever the reported maximum heights are to be exceeded.
- C. Detailed work schedule: See SECTION 01300 – SUBMITTALS.
- D. Cancellations: The Contractor shall only cancel work through the Engineer, Airport Operations Manager, or Airport Duty Manager. Whenever a cancellation is not made and the Contractor is not at the assigned AOA Access Point within thirty (30) minutes of the start time; all Contractor closures for the remaining workweek will be cancelled. The Contractor shall reimburse the State six hundred dollars (\$600.00) for every work cancellation the State deems unjustified. This reimbursement is to compensate the State for all unnecessary costs related to cancelling existing and coordinating new closures.

1.18 CONSTRUCTION LIGHTING REQUIREMENTS

- A. Should any part of the work area lack sufficient sunlight; the Contractor shall provide sufficient artificial lighting to permit the work and inspection to be carried out efficiently, thoroughly, safely, and satisfactorily. Work and inspections shall not be performed with only flashlight and/or vehicle/equipment headlights. All lights shall be positioned so they do not blind aircraft pilots, or FAA-ATCT controllers. All wiring for electrical lights and power shall be properly installed, maintained, securely fastened and kept as far as possible from telephone and signal wires. The Contractor shall submit a lighting plan to the Engineer for all work phases that shall be subject to approval.

1.19 ENVIRONMENTAL AND HEALTH REQUIREMENTS

- A. The Contractor shall perform the following in accordance with all applicable federal, state, local, and airport rules and regulations related to environmental pollution control, abatement, and fire code.
- B. Airport water: Airport water shall not be drawn from a tap lacking a reverse pressure principal backflow prevention device. Water valves shall be opened and closed so that water hammers are not produced.
- C. Waste Disposal: Waste disposal shall be performed properly. Materials shall not be burned, and construction wastes shall not be disposed into Airport storm water or sewer systems.
- D. Restoration: Completely restore, to an acceptable condition; staging area, work area, AOA travel routes, and areas adjacent to the aforementioned.
- E. When the Contractor damages an existing Airport perimeter fence, the Contractor shall perform immediate repairs on the fence to prevent inadvertent entry and maintain Airport Security.
- F. Vehicle/equipment leaks and material spills: Shall be handled by the following five-step process, and pertains to all fluids other than potable water:
 - 1. All leaked or spilled fluids shall immediately be kept from entering the Airport storm water and sewer systems.
 - 2. All fluid leaks or spills shall be respectively fixed or stopped, immediately after ensuring that the fluids are kept out of the Airport storm water and sewer systems.
 - 3. All areas containing the leaks or spills shall be properly cleaned and restored.
 - 4. Dispose all wastes per Section 1.08.B.
 - 5. Submit proper documentation to the State showing that all leaks or spills were properly cleaned and disposed.
- G. Erosion control: The Contractor shall provide any essential temporary drainage, dikes, and similar facilities to prevent erosion damage to the site. Run-off shall be controlled to prevent damage to the surrounding areas.
- H. Dust control: The Contractor shall positive measures to ensure that dust is properly controlled without chemicals and/or oil treatments.
- I. Noise control: Noise control shall be within the levels that comply with all applicable regulations.

1.20 OTHER REQUIREMENTS

- A. The Contractor shall also comply with the following requirements should they arise:

- B. Any new TSA (Transportation Security Administration) security requirements.
- C. Any additional operational safety requirement generated by the FAA.
- D. Provide additional lights along AOA travel routes should the Engineer deem additional safety enhancements are needed.
- E. Any new environmental and health requirements generated by the EPA (Environmental Protection Agency) or DOH (Department of Health).

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - MEASUREMENT & PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

- A. Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the bid prices for the various items of work in this project.

END OF SECTION

DIVISION 2 – SITE WORK

SECTION 02015 – EXISTING CONDITIONS: ASBESTOS/LEAD/HAZARDOUS MATERIAL SURVEY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Provisions of the Contract, including General and Special Provisions and General Requirements of the Specifications shall apply to the work specified in this section.

1.02 SUMMARY

- A. This section includes the results of the State's survey for Asbestos, Lead and / or other Hazardous materials and is provided for the Contractor's information.
- B. Related Sections include the following:
 - 1. None.

1.03 ASBESTOS

- A. The structure or structures to be renovated or modified under this contract were surveyed for the presence of asbestos containing building materials (ACBM), using 11-501 requirements and/or 11-502 requirements (when applicable). A copy of the initial survey report, as well as any subsequent supplemental survey report(s) if performed, are included in this Section.
 - 1. The report(s) are included, even when no ACBM was found, for the Contractor's information. Review the attached report(s) for the basis on which the negative ACBM finding was made. Suspect ACM not previously tested or identified shall be treated as ACM unless proven otherwise. Should suspect ACM that has not been previously tested be encountered within the Contract limits, the Contractor shall notify the Engineer who shall coordinate additional testing if deemed necessary. Contractor shall not test any suspect ACM previously tested or any suspect ACM not previously tested unless authorized by the Engineer.
 - 2. If there is ACBM outside of the Contract limits in which work will be performed, this ACBM shall not be disturbed in any way.
- B. If applicable, notify employees, subcontractors and all other persons engaged on the project of the presence of asbestos in the existing buildings in accordance with the requirements of Chapter 110, Article 12 110 2 (f) (1) (B) of the Occupational Safety and Health Standards, State of Hawaii.
- C. In the event that work is required in any building or buildings on the site other than the one(s) designated within this project scope, request copies of the asbestos survey report(s) for such building(s) from the Engineer. Based on the information contained in the additional survey(s), notify affected personnel per paragraph 1.02.B.

1.04 LEAD PAINT

- A. Inform employees, subcontractors and all other persons engaged in the project that lead paint is may be present in the existing building(s) and at the job site. Follow the requirements of 29 CFR 1926.62 and 29 CFR 1910.1025.
- B. All paint shall be considered to contain lead until proven otherwise.
- C. Painted surfaces tested did not detect lead at concentrations at or above the lead paint x-ray fluorescence (ZRF) analyzer lower detection limit.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 SURVEY

- A. The reports listed below shall be used for informational purposes as it relates to the project limits as indicated in the Contract Plans and Specifications. Information included in the reports which are not included within the project limits as indicated in the Contract Plans and Specifications shall not be included as part of the Contractor's work.
 - 1. Asbestos Inspection Report, 30 pages, dated May 2007, prepared by R. M. Towill Corporation.

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

- A. Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the bid prices for the various items of work in this project.

END OF SECTION

STATE DEPT. OF TRANSPORTATION - AIRPORTS DIVISION
ASBESTOS MANAGEMENT PLAN

Contract No. 45599
Delivery Order No. 8:
Outer Island Airport Facilities



ASBESTOS INSPECTION REPORT
KEAHOLE AIRPORT

KONA, HAWAII

Prepared For:

State of Hawaii
Department of Transportation
Airports Division

May2007



Prepared by:

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ASBESTOS INSPECTION REPORT

KEAHOLE AIRPORT
KONA

ISLAND HAWAII

MAY2007

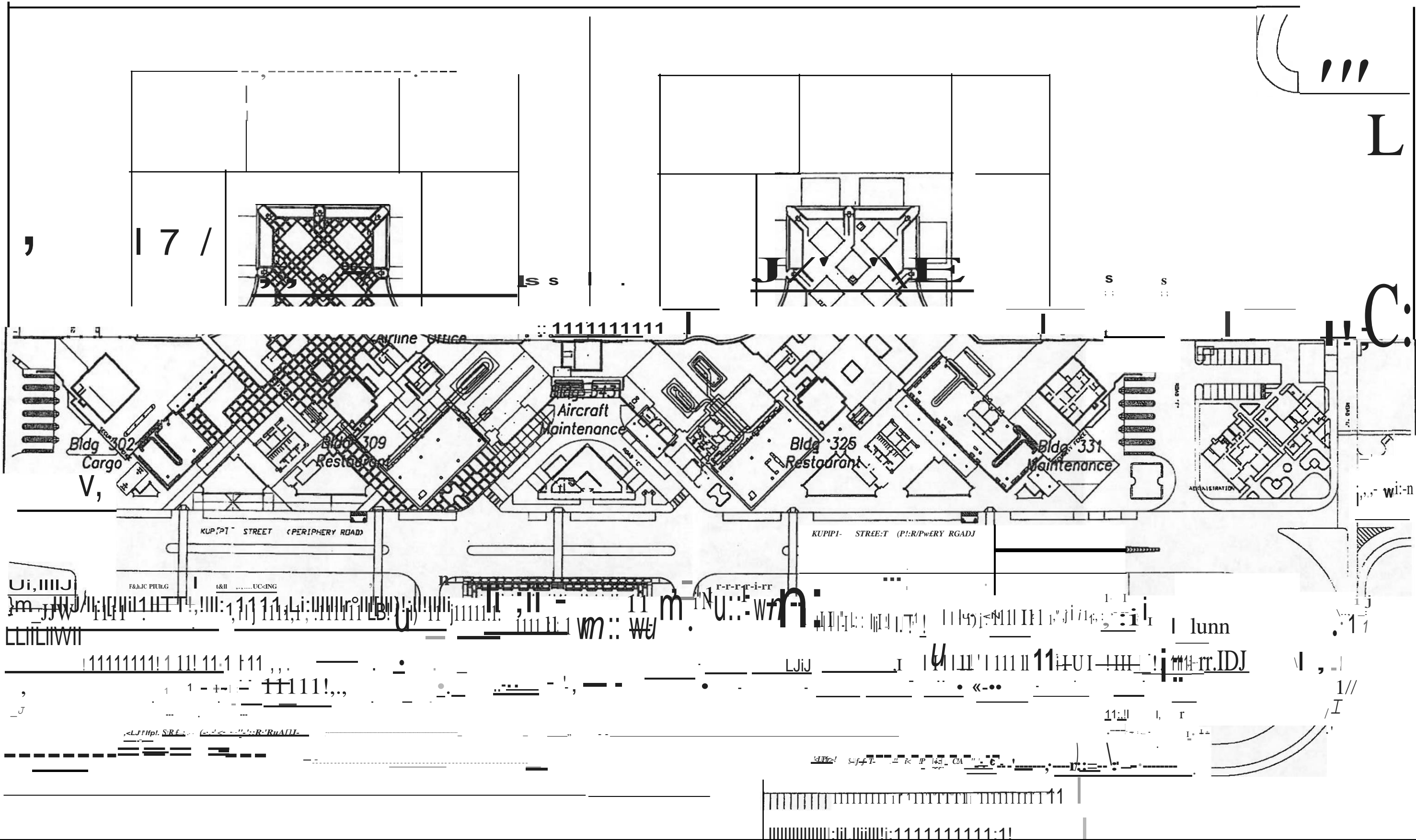
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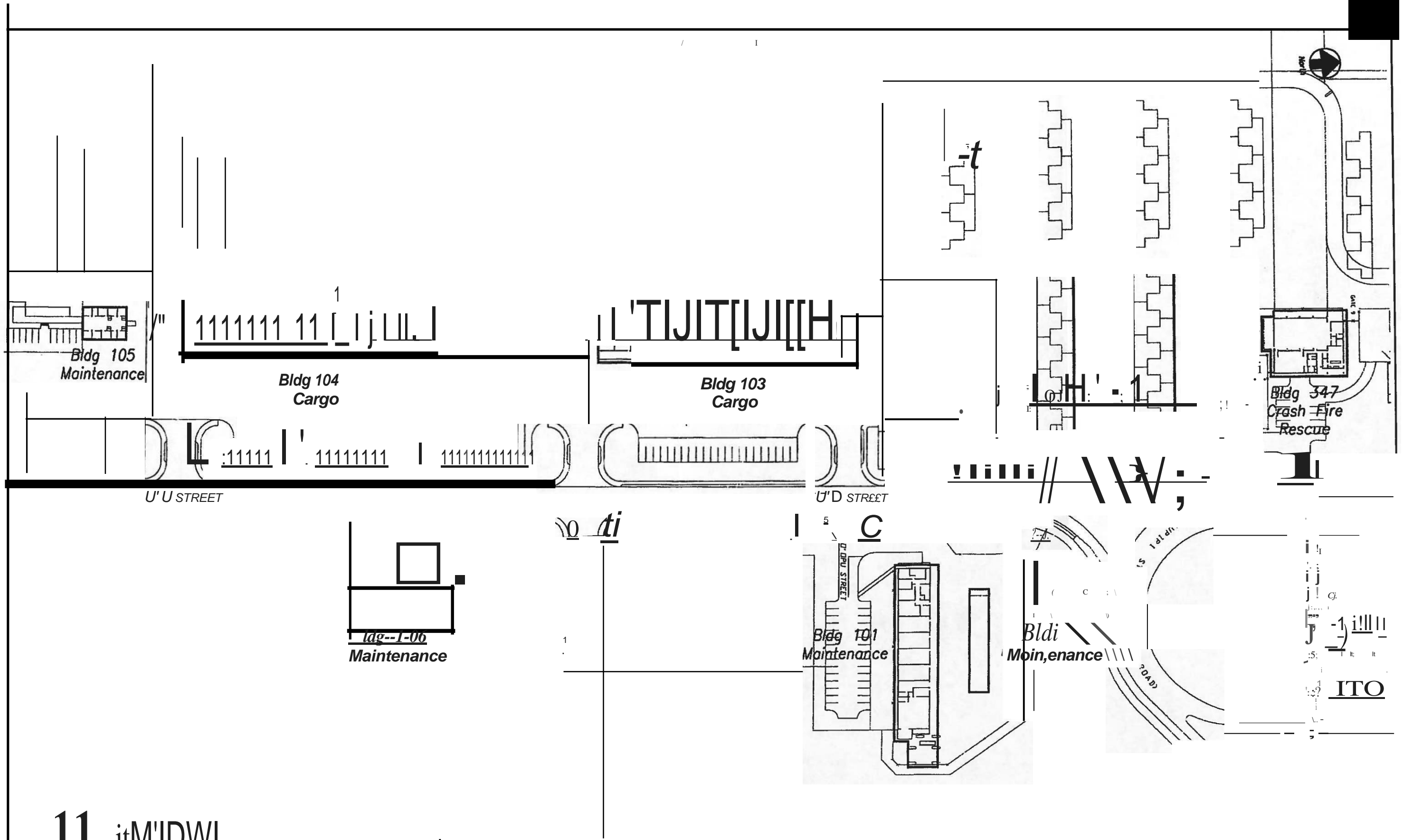
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Asbestos Inspection Report, Keahole Airport, May 2007

**Building Layout
Keahole Airport
Passenger Terminal Area**

**Figure
1**



11. itM'IDWI

TABLE OF CONTENTS

	Page
SECTION 1	
INTRODUCTION.....	1-1
1.1 Purpose	1-1
1.2 Scope of Work	1-1
1.3 Limitations	1-4
SECTION 2	
METHODS.....	2-1
2.1 Review of Historical Information	2-1
2.1.1. <u>Review of Historical Aerial Photographs</u>	2-1
<u>Review of Historical Inspection Data</u>	2-1
2.2 Inspection and Sample Collection	2-1
2.3 Analytical Procedures	2-2
SECTION 3	
RESULTS	3-1
3.1 Results from Review of Historical Information	3-1
<u>Summary of Historical Aerial Photograph Review</u>	3-1
<u>Summary of Historical Inspection Data Review</u>	3-2
3.2 Asbestos Inspection Results	3-4
SECTION 4	
CONCLUSIONS	4-1
APPENDICES	
APPENDIX A - FIGURES	
APPENDIX B - PHOTOS	
APPENDIX C - LABORATORY DATA	

SECTION 1

Introduction

R.M. Towill Corporation (RMTC) was contracted by the State of Hawaii, Department of Transportation - Airports Division (DOT-A) to inventory all of the asbestos-containing building materials (ACBM) present in buildings owned or operated by DOT-A statewide. This inventory is being conducted under Contract No. 45599.

This report details the results of asbestos Inspections at Keahole Airport In Kona, on the Island of Hawaii. Included are maps identifying the locations of all samples collected, complete copies of all laboratory data reports, and photographs and figures identifying the locations of all ACBM identified during these inspections.

1.1 PURPOSE

The purpose of this report is to document RMTC's Inspections of the Keahole Airport for the presence of ACBM. This report is intended to be a useful resource for DOT-A management, personnel, tenants, contractors, and other interested parties. The use of these data are intended for maintenance personnel, housekeeping staff, tenants of building spaces, construction workers and planners, and airport management for use in the identification, maintenance, and management of asbestos-containing materials to prevent exposure of workers and occupants of DOT-A buildings to unacceptable levels of asbestos fibers.

1.2 SCOPE OF WORK

The objective of this study is to identify and Inventory all ACBM in buildings owned or operated by DOT-A statewide. This report documents results from RMTC's inspections of Keahole Airport. The individual buildings included in these inspections are listed below in **Table 1**.

In the performance of this project, several tasks were undertaken and completed. The first task was to review historical documentation for information related to the installation, removal, or previous sampling of asbestos containing materials at the Keahole Airport. The second task was to perform physical inspections of all DOT-A facilities at this location. The final task was to produce this report which documents these inspections.

**Table 1:
Buildings at Keahole Airport Inspected for ACBM**

302	Cargo
303	Telephone
304	Baggage Claim
305	Bulk Cargo Storage
306	Arcade
307	Passenger Lounge
308	Transformer / Electrical
309	Restaurant
311	Airline Office & Ticketing Lobby
312	Baggage Make - Up
314	Hawaiian Airlines Ticket Office
315	Baggage Make - Up
316	Baggage Make - Up
317	Bulk Baggage Cover
318	Building
319	Baggage Make - Up
320	Baggage Make - Up
321	Aloha Airline Office
322	Aloha Airline Office
325	Restaurant
326	Transformer
327	Passenger Lounge
328	Arcade
329	Baggage Claim
330	Telephone
331	Maintenance Office
333	Gate 1
334	Gate2
335	Gate3
336	Gate4

LtdWJ1uiliL	
337	Gates
338	Gates
339	Gate7
340	Gate 2
341	Gate9
342	Gate 10
343	United Airlines Maintenance
345	Shelter
346	Shelter
347	Crash / Fire / Rescue
348	Shelter
349	Shelter
350	Shelter
351	Ohzuka Memorial
353	Shelter
355	Building
358	Building
360	Building
361	Terminal
362	Terminal
363	Terminal
365	Shelter
366	Shelter
367	Shelter
368	Shelter
369	Shelter
370	Baggage Claim
371	Ticketing Lobby
372	Ticketing Lobby
373	Restroom
374	CTXRoom

1.3 LIMITATIONS

The Inspections conducted for this project were intended to be complete building inspections, encompassing all building materials in each of the buildings inspected. During the inspections performed for this project, all reasonable attempts were made to access all buildings and locations, and to observe and sample all materials that may contain asbestos fibers. Since the facilities are still in operation, destructive sampling and inspection methods could not be used in all cases.

It is possible that other materials that may contain asbestos are present in areas that could not be readily accessed (i.e. behind walls, under existing flooring, or other layers of finish materials). In addition, roofing materials could not be sampled without compromising the integrity or warranty of the waterproof layer and causing water leaks into the buildings during rain events. These limitations are typical of most asbestos inspections of occupied buildings.

Prior to the removal or replacement of roofing materials and during demolition and renovation activities, workers should be informed to look for suspect materials and report their discovery to the DOT-A before proceeding with work in that area. The DOT-A should refer to this report for the asbestos status of the materials, and if the materials were not previously sampled, then additional sampling should be performed to characterize any suspect materials that have not been previously tested for asbestos.

SECTION 2

Methods

This section describes the methods and procedures used by RMTC during review of historical information, while conducting asbestos inspections at Keahole Airport, and for laboratory analysis of building material samples for bulk asbestos content.

2.1 REVIEW OF HISTORICAL INFORMATION

In order to incorporate all historical information related to the presence of asbestos containing building materials, RMTC searched for and reviewed all available documentation relevant to the presence of ACM prior to performing asbestos inspections of the buildings at Keahole Airport.

ZLJ. Review of Historical Aerial Photographs

Due to the phasing-out of ACM in the US in the mid to late 1970s, the time frame in which a building was built provides important information about the likelihood that ACM were used in its construction. Buildings constructed prior to this time are much more likely to contain ACMs than buildings built afterwards. Aerial photographs from RMTC's photogrammetry department were reviewed to establish a time line of major construction and renovation projects at Keahole Airport. Results from this review are presented in Section 3.1.1.

2.1.2 Review of Historical Inspection Data

The documents reviewed included a historical asbestos inspection report which included data from a previous inspection of Keahole Airport. Information from this report was used to prevent duplication of previous efforts and to assist in the identification of all asbestos materials in the airport buildings. Results from this review are presented in Section 3.1.2.

2.2 INSPECTION AND SAMPLE COLLECTION

The inspections documented in this report were conducted in accordance with regulations and guidance documents published by the US Environmental Protection Agency and the Hawaii Department of Health. These regulations were originally designed to specify procedures for the inspection of school buildings, however subsequent guidance specifies their use in all public buildings. All inspections were performed by inspectors trained and certified to work in the State of Hawaii.

Physical inspections were conducted by Benjamin Owen (HI State Certification # HIA B-0904) and David Gerow in July and August, 2006. In the performance of these inspections, each building or area was first thoroughly inspected to identify the types of materials that had been used in its construction. Suspect building materials, or materials that were suspected of containing asbestos (based on the presence of fibrous constituents) were inventoried. Materials such as wood, metal, foam, rubber, or plastic were assumed to be free of asbestos in accordance with EPA guidelines. Suspect materials that appeared to be the same from one room to another based on their appearance or time of installation were considered to be the same and belong to the same homogeneous material.,

Once the location, type, and area of each suspect building material had been documented, samples of each material were collected in accordance with EPA and state regulations. These guidelines specify that three samples of each material be collected into separate samples. If any of the samples collected from a homogeneous suspect material is positive, then all of the material is considered to contain asbestos. For each sample collected, a small quantity of material was placed in a small plastic bag, labeled, and submitted to a certified analytical laboratory for analysis of bulk asbestos content. In areas that were occupied, all attempts were made to hide any possible damage that may have resulted from collection of samples. For example, if samples were collected from drywall, the hole was patched with a caulking compound. As much as possible, samples were collected from locations that will not be evident to the occupants.

In some cases, asbestos containing materials were identified by the inspectors without collecting samples from these materials. This identification of suspect materials as ACM, assumed to contain asbestos, was based on historical information from previous inspection reports and the judgement and professional experience of the individual inspector. This type of identification allows the inspector to leave the material intact, and is a practical alternative for small quantities of ACM which are found to be in good condition.

2.3 ANALYTICAL PROCEDURES

All samples collected during this building inspection project were analyzed for bulk asbestos content at the Environmental Hazard Services Laboratory located in Richmond, VA. This laboratory is accredited with the US EPA and the Hawaii Department of Health to perform analysis of building materials samples for the presence of asbestos. Samples were analyzed using EPA Method 600/R-93/116, the method required for the identification and quantification of bulk asbestos content. This procedure uses a Polarized Light Microscope and standard mineralogical techniques to positively identify the presence of asbestos and to determine the concentration of asbestos in the samples. Materials that are reported to contain greater than 1 % asbestos by weight are considered to be asbestos containing building materials.

SECTION 3

Results

This section documents the results of RMTC's inspection for the presence of asbestos-containing materials at Keahole Airport. Section 3.1 presents results from the review of historical asbestos inspection data. Section 3.2 presents the results of asbestos inspections performed by RMTC, including sampling locations, analytical results, and descriptions of all ACBMs identified at Keahole Airport.

3.1 RESULTS FROM REVIEW OF HISTORICAL INFORMATION

Summary of Historical Aerial Photograph Review

Aerial photographs covering the location of Keahole Airport were available from RMTC's Photogrammetry Dept. for the years 1950, 1962, 1969, 1972, 1973, 1976, 1978, 1982, 1984, 1987, 1991 and 1994. Significant changes to the airport in each of these photographs are described below.

1950 Photo: In this photo, the airport is not yet present and no development is visible.

1970 Photo: In this photo, the initial runway has been built and the passenger terminal areas appear to be under construction. The parking area is small, the runway is less than half its current length, and none of the support facilities such as the cargo and maintenance areas have been constructed.

1980 Photo: In this photo, the airport appears functional and busy with planes on the tarmac and the parking lot full. The passenger terminal has not been expanded or renovated.

1988 Photo: In this photo, the runway has been extended to the south, the maintenance base yard has been constructed, and the cargo area is under construction. The T-Hangar buildings are also visible.

1992 Photo: In this photo, the cargo area has been completed and the parking areas have been expanded.

1995 Photo: In this photo, the airport appears much as it did in the 1992 photo, however the runway has been extended to the north, to approximately twice its original length.

1999 Photo: In this photo: the passenger terminal areas have clearly undergone a major renovation since the previous photo was taken in 1995. Although the general layout of the buildings is similar, it is clear that major renovations have taken place including the construction of many new pavilion structures, especially around the passenger holding areas and boarding gates.

3.1.2 Summary of Historical Inspection Data Review

A report from an asbestos inspection performed in 1992 by Hall-Kimbrell (HK) was obtained from DOT-A and reviewed prior to inspections at Keahole Airport. This report included data from a previous inspection of Keahole Airport, which was used to inform RMTC's inspections. Information from this historical inspection report is summarized by building in **Table 2**. Buildings where ACM were identified are highlighted in bold text.

The 1992 inspection report identifies suspect materials in numerous buildings at Keahole Airport. Sampling results confirmed the presence of ACM in the following buildings: Maintenance (Building 100), Air Cargo (Building 302), both restaurant buildings (Buildings 309 and 325), Buildings 313, 314, 322, and 343, and the Crash/Fire/Rescue Building (Building 347). The ACM identified in these buildings are described in **Table 3**.

Table 2: Summary of Results, by Building, from 1992 Inspection

Building No.	Description of Building In 1992 Report	Suspect Mtls. In 1882?	ACBM In 1892?	Current Description of Building
101	Maintenance Building	Yes	Yes	Maintenance
102	Maintenance Shed	Yes	No	Maintenance
103	Air Cargo Bkkl	Yes	No	Air Cargo
301	Electrical Vault	No	No	Electrical
302	Air Cargo	Yes	Yes	Cargo
303	Buffding	Yes	No	Telephone
304	Baggage Claim	Yes	No	Baggage Claim
305	Lost & Found	Yes	No	Bulk Cargo Storage
306	Info Booth / Hotel Greeter	-Yes	No	Arcade
307	Gift Shop	Yes	No	Passenger Lounge
309	Restaurant	Yes	Yea	Restaurant
310	Gifts	No	No	No Longer Present
311	HawaUan Air Check-In	Yes	No	Airline Office & Ticketing
312	Office Building	Yes	No	Baggae Make - Up
313	Bulding	Yes	Yea	No Longer Present
314	Office Bulding	Yes	Yes	Hawaiian Airllines
315	Baggae Building	Yes	No	Baggage Make - Up
316	Baaaage Building	Yes	No	Baagaae Make - Up
318	Storage	Yes	No	Building
319	Storaee	Yes	No	Baggage Make - Up
320	Building	Yes	No	Baagage Make - Up
321	Building	Yes	No	Aloha Airline Office
322	Office	Yes-	Yes	Aloha Airline Office
323	Office / Check In	Yes	No	No Longer Present
324	Arcade	No	No	No Longer Present
325	BULiding	Yes	Yes	Restaurant
328	Electrical Transformer	No	No	Transformer
327	Gift Shop	Yes	No	Passenger Lounge
328	Information Building	Yes	No	Arcade
329	Baggage Claim	No	No	Baggaeoe Claim
330	Telephone Cover Buildna	No	No	Telephone
331	Cargo	No	No	Maintenance Offices
332	Commuter Air Terminal	Yes	No	Not on Map
343	Office / Storage	Yes	Yes	No Longer Present
344	Car Rental	Yes	No	No Longer Present
347	Crash / Fire / Rescue	Yes	Yes	Crash / Fire / Rescue
348	Security Check	Yes	No	No Longer Present
403	T-Hangar	Yes	No	T-Hangar
404	T-Hangar	Yes	No	T-Hangar

Table 3: ACBM Identified in 1992 Inspection of Keahole Airport

Building No.	Building Description	Asbestos Materials Identified	Material Description and Notes
101	Maintenance	2	Whitemastic flooring material and white sink undercoating
302	Air Cargo	1	White with black 12" x 12" floor tiles
309	Restaurant	1	Gasket on HVAC duct
313	Building	1	Grey 12" x 12" flooring material
314	Office	1	White with black 12" x 12" vinyl floor tiles
322	Office	2	White with black 12" x 12" vinyl floor tiles and sink undercoating
325	Restaurant	1	Gasket on HVAC duct.
343	Office / Storage	1	Tan 12" x 12" vinyl floor tiles

3.2 ASBESTOS INSPECTION RESULTS

This section presents results from RMTc's Inspections at Keahole Airport. A complete listing of the buildings Inspected for this survey is provided In **Table 1**.

The majority of the buildings at Keahole Airport are open-air pavilions constructed of wood framing members and finished with wood panels, wood siding and ceramic tiles, as shown In **Photos 1 through 4**. For the majority of these structures, no suspect materials were identified.

This report details inspection results for buildings that fall into one of the following categories:

- Buildings where ACBM were identified in the 1992 inspection report (as described In Section 3.1.2), and/or
- Buildings where RMTc identified additional suspect materials.

These buildings include Buildings 101, 104, 302, 309, 313, 314, 322, 325, 331, 343 and

347. The locations of these buildings are identified in **Figures 1 and 2**. Inspection results for each building are described below. For each of the other buildings listed in **Table 1** but not listed or described here, no suspect materials were identified and no ACBM was found.

For each of the buildings described in this section, suspect materials are listed and ACBM are identified and described. Suspect materials identified at Keahole Airport are described in **Table 4**; sampling results are also presented in this table. Asbestos containing materials are further detailed in **Table 5**. Photographs of all suspect materials are included in **Appendix B**. A complete copy of the laboratory data report, including chain of custody documentation, is included in **Appendix C**.

Table 4: Results of Bulk Asbestos Analysis,
Samples Collected from DOT-A Facilities, Keahole Airport

Homogeneous Material No.	RMTCSample Nos.	Sample Date	Material Type	Material Description	Status	Asbestos %	Asbestos Type	Notes.
K1a	KOA-001a KOA-002a KOA-003a	7/18/2006	MISC	FloorTile	Negative	0%	NAO	Gray 12"x1T floor tiles in Building 343.
K1b	KOA-001b KOA-002b KOA-003b	7/18/2006	MISC	Mastic	Negative	0%	NAD	Yellow mastic beneath gray 12" x 1T floor tiles in Building 343:K
K2	Not Sampled	1992	MISC	FloorTile	Positive	3%	Chrysotile	White 12" x 12" floor tiles with black textured pattern in Building 302.
K3	Not Sampled	1992	MISC	Floor Tile	Positive	15%	Chrysotile	White 12"x12" floor tiles with black textured pattern in Building 314.

NAO = No Asbestos Detected

Table 5: ACBMs Identified in DOT-A Facilities, Keahole Airport

Material Information					Asbestos Data			Potential for:			Notes
No.	Type	Description	Quantity	Condition	Type	%	Friable?	Disturb	Air Erosion	Vibrate	
K2	MISC	Floor Tile	150 ft. ²	Good	Chrysotile	3%	No	Low	Low	Low	!White 12" x 12" floor tiles with black textured pattern in Building 302.
K3	MISC	Floor Tile	770 ft. ²	Good	Chrysotile	15%	No	Low	Low	Low	!White 12" x 12" floor tiles with black textured pattern in Building 314.

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Building 101 - Maintenance Baseyard Building

The Maintenance Baseyard Building (Bldg 101) is a steel and concrete building with a metal roof. The building has a single story with an area of approximately 13,000 sq. ft..

The 1992 inspection report identified two ACM in this building: 12" x 12" white floor tiles with a black textured pattern and white sink undercoating. The materials were not identified during RMTC's inspection. According to the maintenance supervisor on duty at the time of the inspection, the sink had been removed and all of the floor tiles had been removed and replaced with non-ACM floor tiles. No other suspect materials were identified in this building.

Building 104- Cargo Building

The Cargo Building (Bldg 104) is a steel framed warehouse structure with a sheet metal exterior, as shown in **Photo 5**. The approximate area of the building is 24,000 sq. ft..

The 1992 Inspection report did not identify any ACM in this building. RMTC's inspection identified brown floor tiles inside a small office area within the warehouse structure as a potentially suspect material. However, the 1992 report indicated that this building had a bare concrete floor in 1992, and personnel working in the building indicated that the floor tiles had been recently installed. Based on this information, the floor tiles were eliminated as possible suspect materials and no samples were collected.

Building 302 - Air Cargo Building

The Air Cargo Building (Bldg 302) is a concrete and wooden building with a wood framed interior. The approximate area of the building is 3,600 sq. ft.. Most of the building has a concrete floor, however floor tiles are present in the office and bathroom areas.

The 1992 Inspection report identified one ACM in this building: 12" x 12" white floor tiles with a black textured pattern. Inspections conducted by RMTC identified floor tiles meeting this description in the office and bathroom areas, as shown in **Photos 6 and 7**, respectively. Data from the 1992 report indicate that these tiles, which are identical to asbestos-containing floor tiles that were previously identified at the Hilo Airport (RMTC, in press) contain 3% chrysotile asbestos. Both the floor tiles and the associated mastic are assumed to contain asbestos. The extent and location of this material is illustrated in **Figure 3**.

Building 309 - Restaurant

Building 309 is a concrete and wood framed building with an approximate size of 2,200 sq. ft.. The interior walls and floors are finished with wood panels and ceramic tiles, respectively.

The 1992 inspection report identified one ACBM in Building 309: a gasket on an air conditioning duct. This material was not identified during RMTc's inspections. No other suspect materials were identified in this building. No ACBM were identified in Building 309, as shown in **Figure 4**.

Building 313

This building is no longer present and has been replaced by Building 311, the Airline Office and Ticketing Lobby. The ACBM identified in the 1992 report is no longer present.

Building 314 - Hawaiian Airlines Ticket Office

The Hawaiian Airlines Ticket Office (Building 314) is a single-story concrete and wood building with an approximate size of 1,200 sq. ft.. In addition to the ticket office, the building also includes restrooms and maintenance storage closets. The offices have vinyl tile flooring, whereas the restrooms and storage areas do not.

The 1992 inspection report identified one ACBM in this building: 12" x 12" white floor tiles with a black textured pattern. Inspections conducted by RMTc identified floor tiles meeting this description throughout the office areas, as shown in **Photos 8 and 9**. These tiles are identical to the tiles identified in Building 302. The 1992 report indicated that the mastic beneath these floor tiles contains 15% chrysotile asbestos by weight. Both the floor tiles and the associated mastic are assumed to contain asbestos. The location and extent of this material is presented in **Figure 5**.

Building 322 - Aloha Airline Ticket Office

The Aloha Airlines Ticket Office (Building 314) is a single-story concrete and wood building with an approximate size of 1,200 sq. ft..

The 1992 inspection report identified two ACBM in this building: 12" x 12" white floor tiles with a black textured pattern and white sink undercoating. These materials were not identified during RMTc's inspection. Both materials appear to have been removed. According to Aloha Airlines personnel interviewed during inspections, the entire building

was recently gutted and renovated. No suspect materials were identified in this building.

Building 325 - Restaurant

Building 325 is a concrete and wood framed building with an approximate size of 2,200 sq. ft.. The interior walls and floors are finished with wood panels and ceramic tiles, respectively.

The 1992 Inspection report identified one ACBM in this building: a gasket on an air conditioning duct. This material was not identified during RMTTC's inspections. No other suspect materials were identified in this building, and no ACBM were identified, as shown in **Figure 6**.

Building 331 - Maintenance Offices

The Maintenance Building (Building 331) is a single story concrete building with a wood-framed roof. The approximate area of the building is 3,600 sq. ft..

The 1992 inspection report did not identify any ACBM in this building. RMTTC's inspection identified several types of vinyl floor tiles as potentially suspect materials. However, the 1992 report indicated that this building had a bare concrete floor in 1992, and maintenance personnel working in the building indicated that the floor tiles had been recently installed (when the building was converted to offices for the maintenance department). Based on this information, the floor tiles were eliminated as possible suspect materials and no samples were collected. No ACBM were identified in Building 331, as shown in **Figure 7**.

Building 343 - United Airlines Maintenance Building

The Maintenance Building (Building 331) is a single story concrete building with a wood-framed roof. The approximate area of the building is 3,600 sq. ft..

The 1992 inspection report identified one ACBM in this building: tan 12" x 12" vinyl floor tiles. This material was not identified during RMTTC's inspection. Samples were collected from the gray 12" x 12" vinyl floor tiles that were found in place of the tan 12" x 12" tiles. Results from the analysis of these samples indicated that these tiles do not contain asbestos. The floor tiles from which samples were collected are shown in **Photo 10**. The locations from which samples were collected are presented in **Figure 8**.

SECTION 4

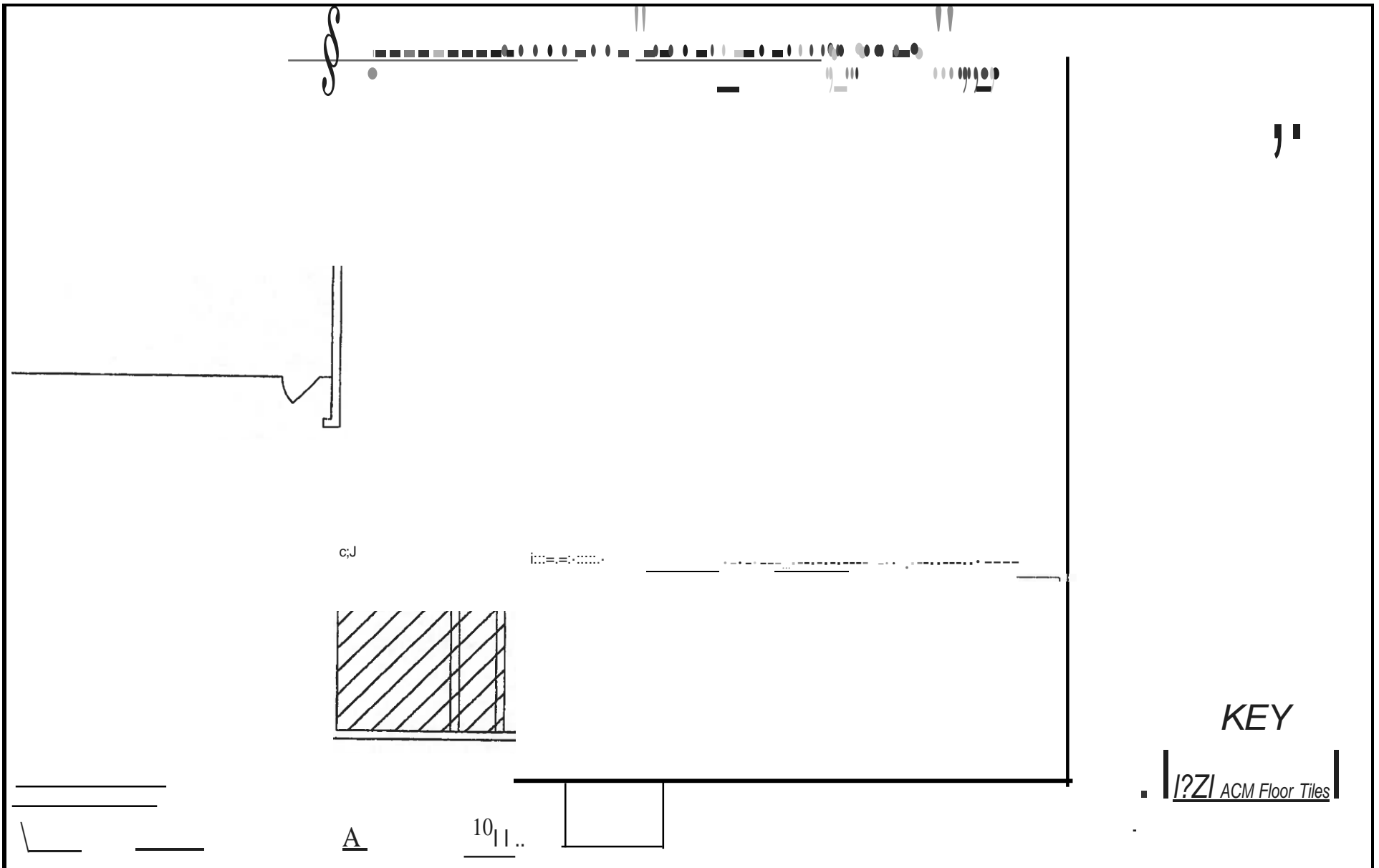
Conclusions

Inspections for the presence of ACBM were performed in all DOT-A buildings at the Keahole Airport. The objective of these surveys was to identify and document the presence of ACBM inside buildings owned or operated by DOT-A. Historical inspection data was used to inform these inspections.

A review of historical aerial photographs has shown that Keahole Airport underwent major renovations in the late 1990's. Most of buildings that presently exist at Keahole Airport are simple, open-air structures that were built at this time. The construction of these pavilion structures is such that most building materials are visible, and no suspect materials are present.

Historical inspection data from an inspection performed in 1992 identified various ACBM in 8 buildings at Keahole Airport. RMTC's inspections found that many of these buildings have been renovated, while others no longer exist.

RMTC's inspections of the airport identified 3 suspect materials including: floor tiles in Buildings 302, 312 and 343. All of these areas were noted as ACBM in the 1992 inspection report. Floor tiles in two of these areas were assumed to be positive for asbestos (ACBM) based on the historical data, the age and wear of the materials, and the professional experience of the inspector. The third area was sampled and found not to contain asbestos. No other ACBM were identified at Keahole Airport.





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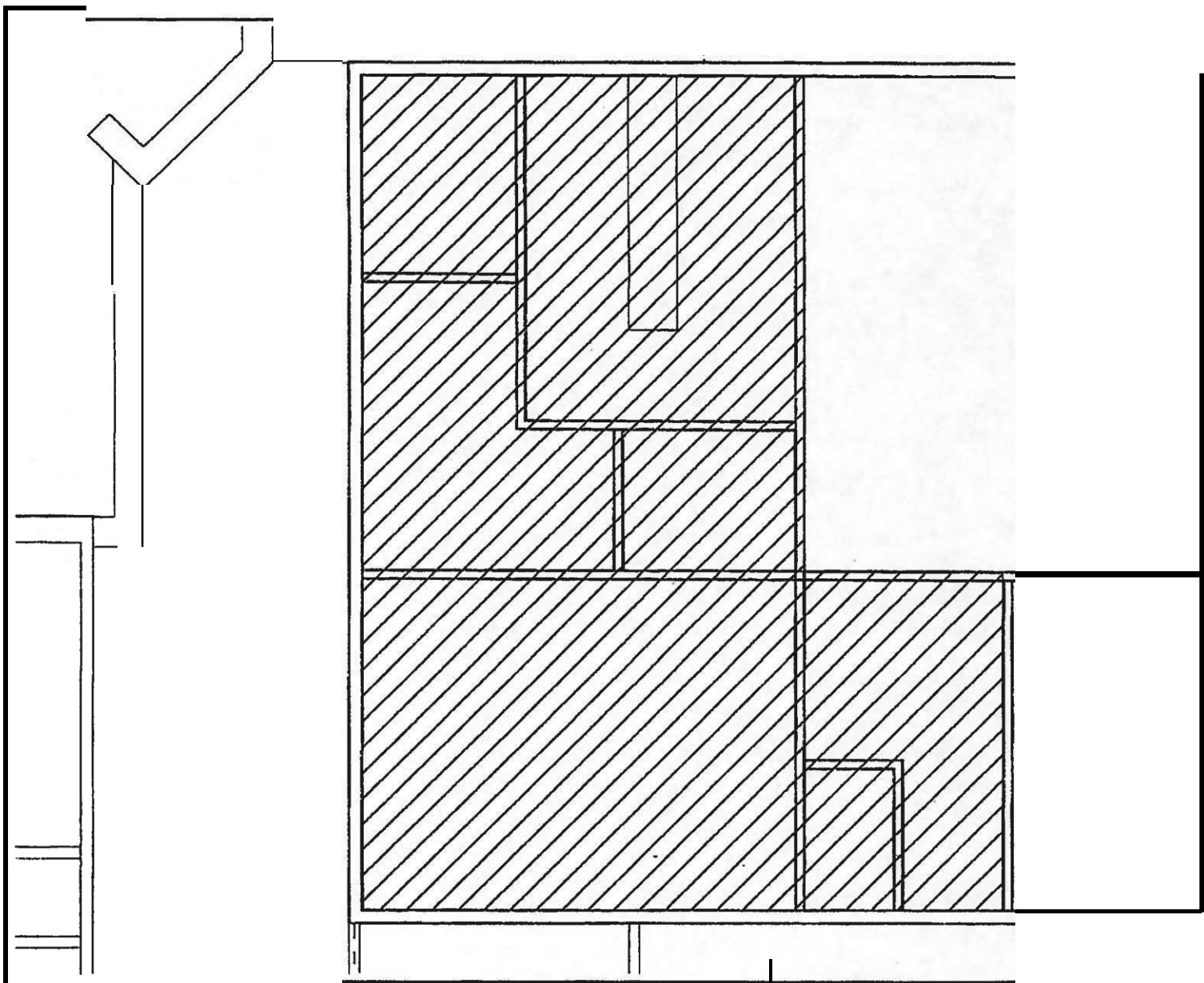
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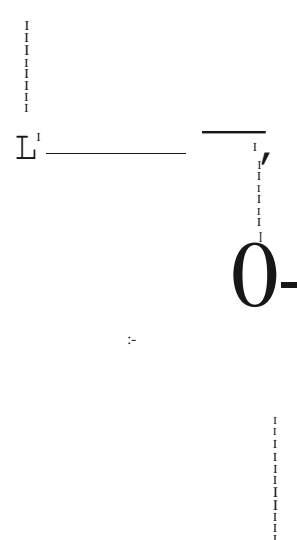
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Location Of Asbestos Materials
Bulding 30 Restaurant
Keahole Airport

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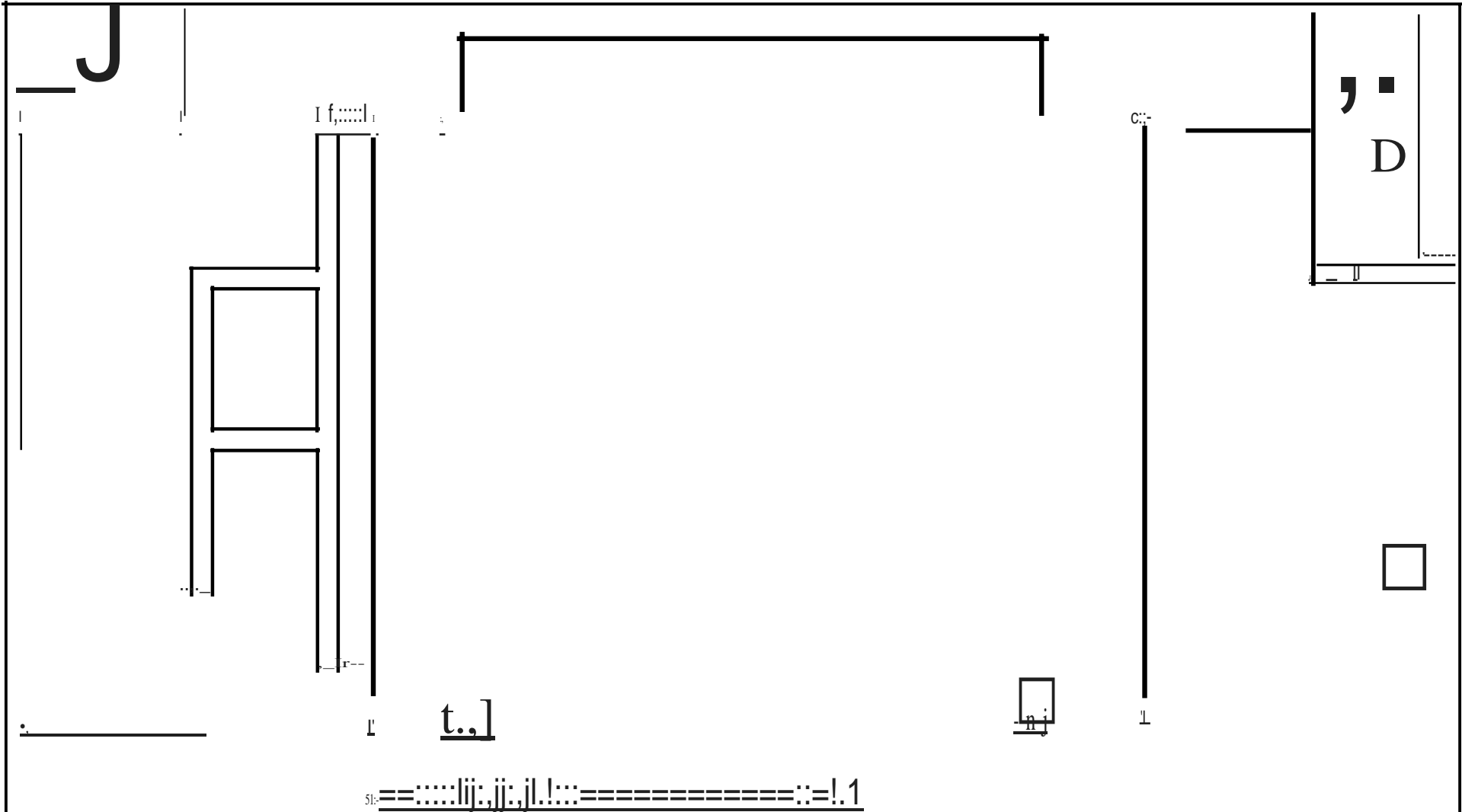
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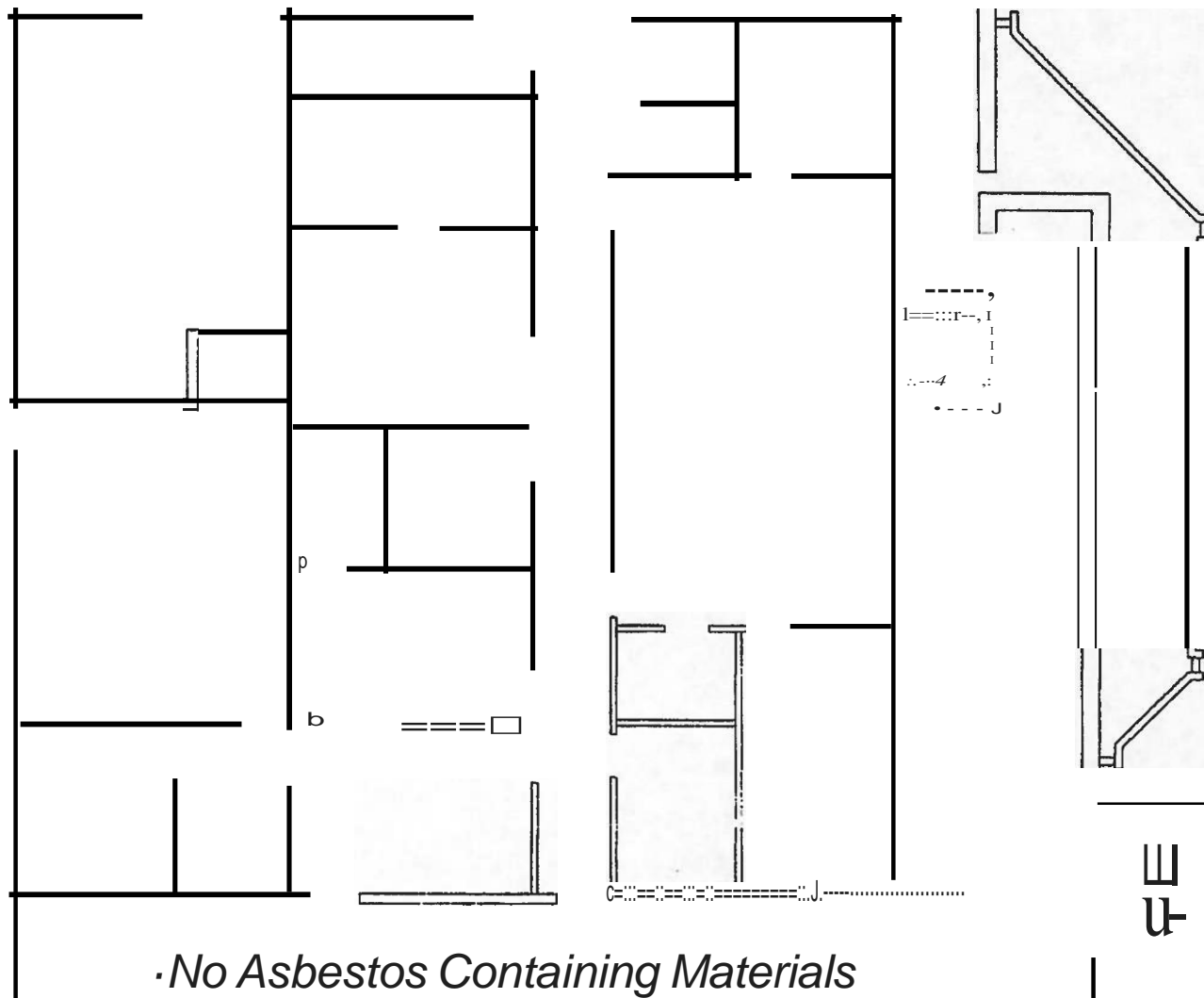
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*Location Of Asbestos Materials
Building 325, Restaurant
Keahole Airport*

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Asbestos Inspection Report, Keahole

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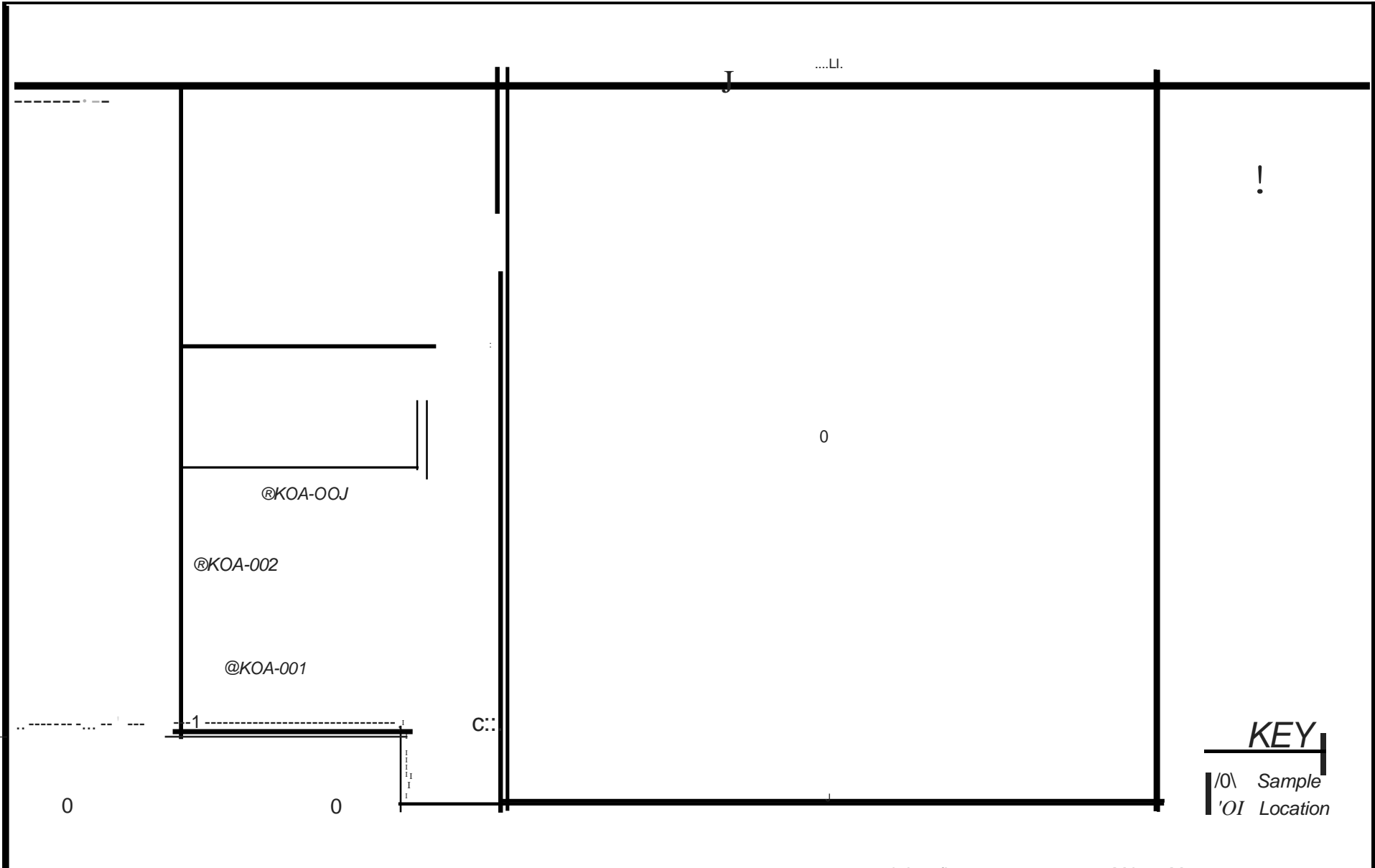
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Location Of Asbestos Materials

Keahole Airport

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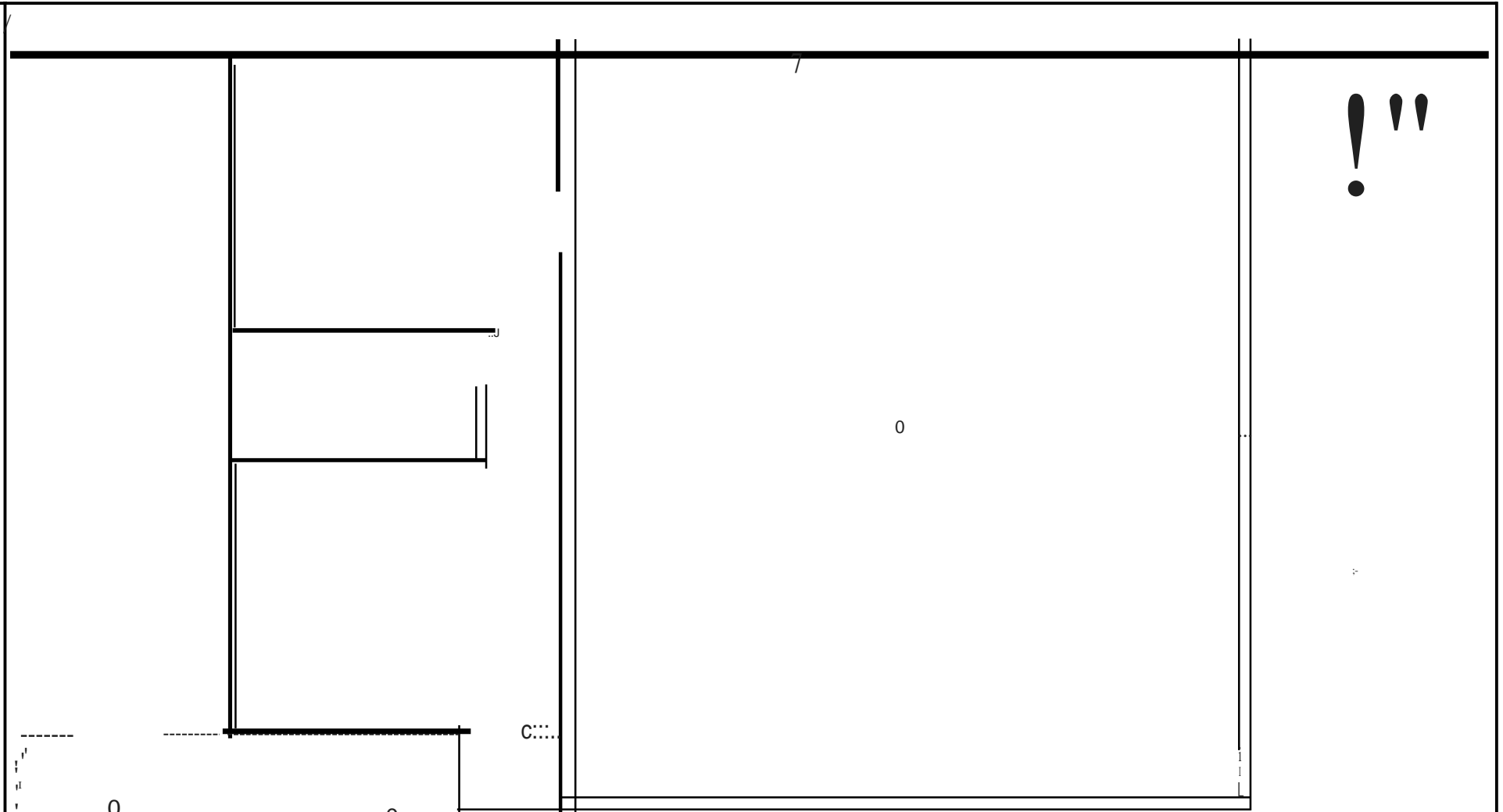


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Sample Locations
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Asbestos Inspection Report, Keahole

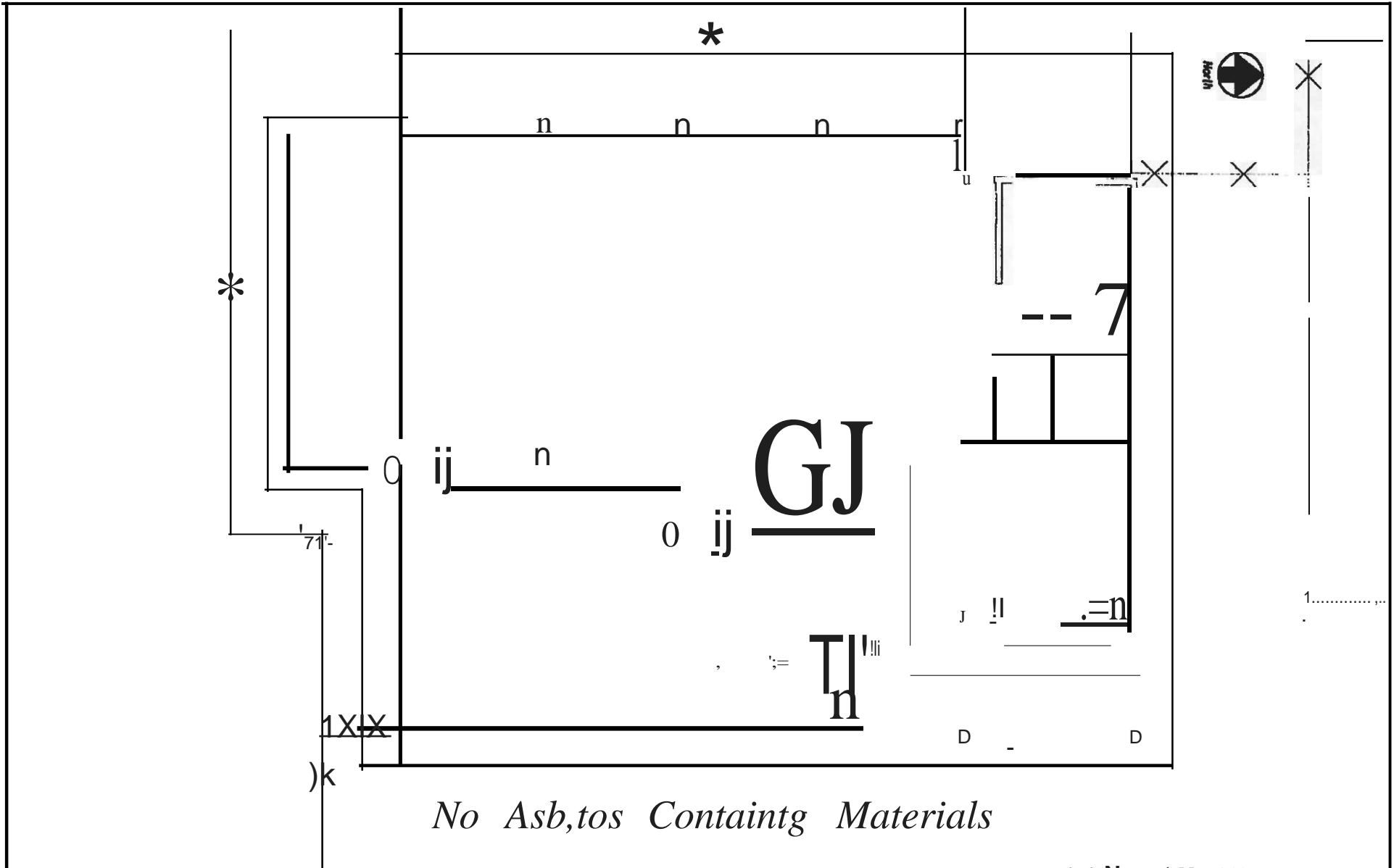
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*Location Of Asbestos Materials
Building 343, Aircraft Maintenance
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Asbestos Inspection Report Keahole Airport May 2007

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Location of Asbestos Materials
Building 347, Crash rfe Rescue
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DIVISION 13 - SPECIAL CONSTRUCTION

SECTION 13851 - ADDRESSABLE FIRE ALARM SYSTEM

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The General Provision of the contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this section.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Division 16 Electrical Work: All power wiring including wiring to disconnect switches and breakers and wiring to all equipment.

1.03 PAYMENT PROCEDURES

- A. Permits, Tests and Inspections: Apply, secure and pay for all required permits, fees, licenses, tests, inspections and royalties necessary to accomplish the work. Schedule and coordinate required tests and inspections.

1.04 SCOPE

- A. System Description: This work includes designing and modifying the existing addressable fire alarm system as described herein and on the contract drawings for Kona International Airport. The system shall include all wiring, raceways, pull boxes, terminal cabinets, outlet and mounting boxes, control equipment, alarm, and supervisory signal initiating devices, alarm notification appliances, and all other accessories and miscellaneous items required for a complete operating system even though each item is not specifically mentioned or described. The system layout on the drawings is conceptual. The new and existing fire alarm panels and power extender panels are indicated. Equipment, materials, installation, workmanship, inspection, and testing shall be in strict accordance with the required and advisory provisions of NFPA 72 except as modified herein.
- B. Existing Fire Alarm Equipment: Existing interior system was manufactured by JCI, and new equipment shall be listed with and shall operate accurately and reliably with the existing system. Existing fire alarm equipment shall be maintained fully operational until the new equipment has been tested and accepted. As new equipment is installed, it shall be tagged "NOT IN SERVICE" until the new equipment is accepted. Once the new system is completed, tested, and accepted by the State it shall be placed in service. The "NOT IN SERVICE" tags shall be transferred from the new equipment to the existing equipment to identify all equipment which is no longer in service and is to be removed from the building.

- C. Equipment Removal: After acceptance of the new system by the State, all existing equipment not connected to the new system shall be removed, all unused exposed conduit shall be removed, and all damaged surfaces shall be restored. Contact the Contracting Officer to determine if any of the existing equipment shall be salvaged.

1.05 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
- B. Code of Federal Regulations (CFR)
 - 1. 29 CFR 1910.36 Occupational Safety and Health Standards, Subpart E - Means of Egress, General Requirements
 - 2. 29 CFR 1910.37 Occupational Safety and Health Standards, Subpart E, Means of Egress, General
- C. American Society of Mechanical Engineers (ANSI/ASME)
 - 1. ASME/ANSIA17.1 (1993) Safety Code for Elevators and Escalators
- D. Factory Mutual Engineering and Research Corporation (FM)
 - 1. FMP7825 Approval Guide (updated online)
- E. National Electrical Manufacturers Association (NEMA)
 - 1. NEMA ICS 1 (1993) Industrial Control and Systems
- F. National Fire Protection Association (NFPA)
 - 1. NFPA 70 (2017) National Electrical Code
 - 2. NFPA 72 (2010) National Fire Alarm Code
 - 3. NFPA 90A (1999) Installation of Air Conditioning and Ventilating Systems
- G. Underwriters Laboratories Inc. (UL)
 - 1. UL 464 (1990) Audible Signal Appliances
 - 2. UL 864 (1991; R 1994, Bul. 1995) Control Units for Fire-Protective Signaling Systems
 - 3. UL 1449 (1985; Errata 1986, Bul. 1993, 1994, and 1995) Transient Voltage Surge Suppressors

- 4. UL FPED Fire Protection Equipment Directory (updated online)
 - H. American Electricians Handbook by Croft (latest edition), McGraw-Hill
 - I. Practical Electrical Wiring by Herbert P. Richter and W. Creighton Schwan, McGraw-Hill
 - J. Copper Development, Inc.'s "Copper Building Wire Handbook"
 - K. National Electrical Safety Code
 - L. Local ordinances and regulations of the County
 - M. Applicable instructions of the manufacturer for equipment and materials supplied for the project.
- 1.06 SUBMITTALS
- A. Submit under provisions of Section 01330 – SUBMITTALS. Partial submittals will not be acceptable. Submit for approval one (1) complete sets of submittals as described below in electronic format, Portable Document Format (PDF). Annotate descriptive data to show the specific model, type, and size of each item the Contractor proposes to furnish. Do not commence work until the design of the system and the various components have been approved. The Contracting Officer will review and approve all submittals. Before work is commenced the shop drawings must be approved.
 - 1. Manufacturer's Catalog Data:
 - a. Fire alarm control panel (FACP)
 - b. Manual fire alarm stations
 - c. Batteries
 - d. Battery charger
 - e. Smoke detectors
 - f. Addressable interface devices
 - g. Audiovisual notification appliances
 - h. Visual notification appliances
 - i. Fire alarm power extender panels
 - j. Amplifiers

2. Shop (Working) Drawings:

a. Point-To-Point Wiring Diagrams: Drawings shall be job-specific. "Typical" or "generic" drawings are not acceptable. The diagrams shall include but not be limited to the following:

- 1) Locations Of All System's Elements: Indicate all devices, junction boxes, handholes, and pass-through devices and entities where the cables and conductors can be accessed by personnel. Indicate the number of devices provided.
- 2) Also indicate the locations of all cable and conductor terminations and intermediate connections showing where they pass through without terminations/connections from and to equipment panels and/or devices.
- 3) Labeling Of All Elements: All devices junction boxes, etc. shall be labeled by functional designations, locations and numbers such as building alphabet, room function and room number, and handhole number.
- 4) Fire Alarm Wiring and Color Codes: All cable and conductor color codes, the wire marking system and marker designation shall be shown.

b. Equipment and/or Modular Systems Wiring Diagram: Wiring diagrams showing all equipment (control panel and annunciator in separate panel) modules, components and key internal cabinet wiring that should be accessed for tests and maintenance. Drawings shall include but not be limited to the following:

- 1) Equipment Modules and Components: The equipment modules and components layout (relative locations in proportion to the modules, components and cabinet/enclosure sizes) including the fire alarm control panel(s), battery cabinets, etc. The drawings shall also show the arrangement of modules, components, wiring and expansion space within the FACP cabinet.
- 2) Input and Output Circuits Labeling: Label the input and output circuits by circuit designations specified herein.
- 3) Internal - External Circuits Interface Information: Only information that interfaces with external circuits and internal equipment wiring need be shown. All external wiring and circuits shall be shown in the riser diagram and the Contractor furnished Point-To-Point Wiring Diagrams.

- c. Provide a complete description of the system sequence of operation for all initiating, notification, and control devices via a sequence of operation matrix diagram.
 - d. Provide a complete list of device addresses and corresponding messages.
3. Design Data:
- a. Standby battery capacity calculations shall list the type of devices and modules, quantities, unit amperage draw for standby and alarm conditions, total amperage draw and battery amp/hour rating. Include this information on the shop drawings.
 - b. Provide detailed voltage drop calculations for all notification appliance circuits and releasing device circuits. Include this information on the shop drawings.
 - c. Provide data on each circuit to indicate that there is at least 25 percent spare capacity for notification appliances, and 25 percent spare capacity for initiating devices.
 - d. Amplifier power calculations shall list the types and quantities of speakers, circuits, loads, and equipment power consumptions. All amplifiers shall be sized for service at 75 percent of their rated capacity for future expansion as necessary.
4. Guaranty.
5. Operations and Maintenance Manual: Provide five (5) bound copies of the Approved Operations and Maintenance Manuals in three (3) hole binders with hard covers. The manuals shall be submitted to the Contracting Officer a minimum of two (2) weeks prior to the final test. Provide 1 compact disk with the electronic version of the manual(s). Include a copy of the Contracting Officer's approval of contractor's submittal. Submit manual for approval by Contracting Officer prior to submitting the electronic copy and hard copies. Submittal shall be approved by the Contracting Officer and the consultant.
- a. The manual may be provided in several volumes if so approved by the Contracting Officer.
 - b. All drawings shall be folded to letter size by individual sheets so they can be retained in the manual.
 - c. The manual shall contain the following:
 - 1) Manufacturer's Printed Equipment/System Operations and Maintenance Manual, and Devices Brochures:

- a) Start-up, operating, preventative maintenance, adjustment and troubleshooting procedures, and parts list.
 - b) System Control Diagrams.
 - c) Internal equipment wiring diagrams.
 - d) List of equipment and devices and quantities.
- 2) Manufacturer's Representatives: The names, addresses and phone numbers of the fire alarm system manufacturer, the nearest manufacturer's representative, and the nearest supplier of the manufacturer's equipment and parts.
- 3) Fire Alarm System Test Results: Provide completed test data sheets with the recorded measured data obtained during pre-final testing in the designated spaces and a printout of the equipment program. The test plan shall be developed in accordance with NFPA 72, Chapter 7. Submit the following information.
- a) NFPA 72 Inspection and Testing and Record of Completion.
 - b) Audibility readings.
 - c) Standard attendance signature sheets.
6. As-Built Drawings: Submit in accordance with Section 01300 – SUBMITTALS. Drawings shall provide a detailed description of system operation during alarm, supervisory, and trouble modes and shall include a complete list of all system addresses including input/output logic. Upon completion and before final acceptance of the work, submit complete set of as built drawings of the system for record purposes. Drawings shall include all components and circuit diagrams complete with conductor color codes and a listing of initiating devices. Submit 24 by 36 inch drawings with title block similar to full size contract drawings. Submittal shall be in electronic format, Portable Document Format (PDF).

1.07 QUALITY ASSURANCE

- A. Qualification of Installer: Installation shall be accomplished by an electrical contractor (C-13) or an Electronic systems contractor (C-15) with a minimum of five years experience in the installation of fire alarm systems in the State of Hawaii. However, a C-13 contractor must provide the power connection to the system. The services of a technician provided by the control equipment manufacturer shall be provided to supervise installation, adjustments, and tests of the system. Prior to installation, submit data for approval by the Contracting Officer showing that the Contractor has successfully installed addressable interior fire alarm systems of the same type as specified herein, or that the Contractor has a firm contractual agreement with a

subcontractor having such required experience. Include the names and locations of at least two installations where the Contractor, or the subcontractor referred to above, has installed such systems. Indicate the type and design of each system and certify that each system has performed satisfactorily in the manner intended for a period of not less than 18 months. Submit names and phone numbers of points of contact at each site.

- B. Qualifications of System Technician: Installation drawings, shop drawings, and "as-built" drawings shall be prepared by, or under the supervision of, a qualified technician. Qualified technician shall be an individual who is experienced with the types of work specified herein, and is currently certified by the National Institute for Certification in Engineering Technologies (NICET) as an engineering technician with minimum Level-III certification in Fire Alarm Systems program. Contractor shall submit data showing the name and certification of the technician at or prior to submittal of drawings.
- C. Regulatory Requirements: Devices and equipment for fire alarm service shall be listed by Underwriters Laboratories, Inc. or approved by the Factory Mutual System or listed by other nationally recognized testing laboratories.
- D. Requirements for Fire Protection Service: Equipment and material shall have been tested by Underwriters Laboratories, Inc. and listed in UL FPED or approved by Factory Mutual and listed in FM P7825. Where the terms "listed" or "approved" appear in this specification, they shall mean listed in UL FPED or FM P7825. The omission of these terms under the description of any item of equipment described shall not be construed as waiving this requirement.
- E. Standard Products: Materials and equipment shall be standard new products of a manufacturer regularly engaged in the manufacture of such products and shall essentially duplicate items that have been in satisfactory use for at least one year prior to bid opening. Select material from one manufacturer, where possible, and not a combination of manufacturers, for any particular classification of materials.
- F. Modification of References: In NFPA publications referred to herein, consider advisory provisions to be mandatory, as though the word "shall" had been substituted for "should" wherever it appears; interpret reference to "authority having jurisdiction" to mean the County Building and Fire Departments.

1.08 GUARANTY AND CERTIFICATE

- A. The Contractor shall guaranty and certify in writing all work in this section for period of two (2) years. Any repair due to defective equipment, material or workmanship within this period, shall be repaired or replaced at no cost to the State.
- B. The two (2) year guaranty shall start at the end of thirty (30) consecutive days of trouble free operation after certification by the Fire Department and acceptance by the State whichever date is the latest. Provide copy of DAGS 30 day trouble free operation form, approved by the Contracting Officer, as part of the closing documents.

1.09 MAINTENANCE

- A. During the fire alarm system's two (2) year guaranty period, the Contractor shall supply complete maintenance and testing services for the entire fire alarm system in accordance with the manufacturer's instructions and NFPA 72. Functional test of the initiating devices and notification appliances shall be done in one complete test per year. Reports prepared on Contractor-furnished standardized forms similar to the form in NFPA 72 shall be submitted to the Contracting Officer each time a test and/or maintenance action occurs.
- B. During the two (2) year guaranty period, the Contractor shall, upon the receipt of notice from the State's representative, promptly make all repairs which include but not limited to defective material, workmanship or equipment. The Contractor shall respond to such notices within 12 hours after receipt of the notice.

The local representative or supplier shall have direct access to replacement parts and a fire alarm repairman, either on his own staff or in a manufacturer's service center, to ensure the system can be restored to normal operation within two (2) days of system failure. All costs including air-fare, car rental, travel time, etc. shall be borne by the contractor.

It is understood that the State will undertake repairs if, following two (2) working days after receipt of such notice, the Contractor fails to make or undertake the repairs with due diligence. The expense in connection therewith shall be charged to the Contractor.

PART 2 - PRODUCTS

2.01 MANUFACTURER QUALIFICATIONS

- A. All components of each new system shall be furnished by a single manufacturer, shall be of current design and shall be in regular and recurrent production. Provide design, materials and devices for a protected premises fire alarm system, complete, conforming to NFPA 72, except as otherwise or additionally specified herein.

2.02 SYSTEM DESIGN

- A. System Operation: System shall be a complete, supervised, addressable fire alarm system conforming to NFPA 72. The system shall operate in the alarm mode upon actuation of any alarm initiating device. The system shall remain in the alarm mode until all initiating device(s) are reset and the fire alarm control panel is manually reset and restored to normal. The system shall provide the following functions and operating features:
 - 1. The FACP and fire alarm control units, if used, shall provide power, annunciation, supervision and control for the system.

2. Provide Class B, initiating device circuits.
3. Provide Class B, signaling line circuits.
4. Provide Class B, notification appliance circuits.
5. Electrical supervision of wiring external to control panel for mechanical equipment shutdown and magnetic door holding circuits will not be required.
6. Provide electrical supervision of the primary power (AC) supply, presence of the battery, battery voltage, and placement of system modules within the control panel, and any extender panel(s).
7. Provide an audible and visual trouble signal to activate upon a single break or open condition, or ground fault which prevents the required operation of the system. The trouble signal shall also operate upon loss of primary power (AC) supply, absence of a battery supply, low battery voltage, or removal of alarm or supervisory panel modules. Provide a trouble alarm silence feature which will silence the audible trouble signal, without affecting the visual indicator. After the system returns to normal operating conditions, the trouble signal shall again sound until the trouble is acknowledged. A smoke sensor in the process of being verified for the actual presence of smoke shall not initiate a trouble condition.
8. Provide a notification appliance silencing switch which, when activated, will cause the notification appliances to cease operating, but not affect the liquid crystal display. This switch shall be overridden upon activation of a subsequent alarm.
9. Provide alarm verification capability for smoke detectors.
10. Provide program capability via switches in a locked portion of the FACP to bypass the automatic notification appliance circuits features. Operation of a switch shall indicate a trouble condition on the FACP display .
11. All alarm, supervisory, or trouble signals shall be automatically transmitted to other networked panels.
12. Alarm functions shall override trouble or supervisory functions. Supervisory functions shall override trouble functions.
13. The system shall be capable of operating, supervising, and/or monitoring both addressable and non-addressable alarm and supervisory devices.
14. The system shall sustain the maximum system capacity on the number of addressable devices which may be in alarm simultaneously.
15. An alarm signal shall automatically initiate the following functions:

- a. Transmission of an alarm signal to the other networked panels.
 - b. Visual indication of the device operated on the fire alarm control panel (FACP). Indication on the graphic annunciator shall be by floor, zone or circuit, and type of device.
 - c. Continuous actuation of all alarm notification appliances.
16. A supervisory signal shall automatically initiate the following functions:
- a. Transmission of a supervisory signal to the other networked panels.
 - b. Visual indication of the device operated on the fire alarm control panel (FACP).
17. A trouble condition shall automatically initiate the following functions:
- a. Transmission of a trouble signal to the other networked panels.
 - b. Visual indication of the system trouble on the FACP.
- B. System Monitoring:
1. Valves: Each valve affecting the proper operation of a fire protection system, including automatic sprinkler control valves, standpipe control valves, sprinkler service entrance valve, valves at fire pumps, and valves at backflow preventers, whether supplied under this contract or existing, shall be monitored to ensure its proper position. Each tamper switch shall be provided with a separate address.
- C. Overvoltage and Surge Protection: Provide a factory approved surge suppressor at power inputs to control panels and power extender panels, on all signaling line circuits that leave the building, and conforming to UL 1449. Suppressor shall be hybrid MOV type providing a maximum clamping voltage of 500 volts and a 150 joule minimum energy dissipation capacity.
- D. Fire Alarm Control Panel (FACP): Provide a complete control panel fully enclosed in a lockable steel enclosure as specified herein. All operations required for testing or for normal care and maintenance of the systems shall be performed from the front of the enclosure. If more than a single unit is required at a location to form a complete control panel, the unit enclosures shall match exactly. Each control unit shall provide power, supervision, control and logic for the entire system, utilizing solid state, modular components, internally mounted and arranged for easy access. Each control unit shall be suitable for operation on a 120 volt, 60 hertz, normal building power supply. Provide each panel with supervisory functions for power failure, internal component placement, and operation. Visual indication of alarm, supervisory or trouble initiation on the fire alarm control panel shall be by liquid crystal display with a minimum of 40 characters.

1. Cabinet: Install control panel components in cabinets large enough to accommodate all components and also to allow ample gutter space for interconnection of all panels as well as all field wiring. The enclosure shall be identified by an engraved laminated phenolic resin nameplate. Lettering on the nameplate shall say "Fire Alarm Control Panel" and shall not be less than 0.75 inch high. Provide prominent rigid plastic or metal identification plates for all lamps, circuits, meters, fuses and switches. The cabinet shall be provided in a sturdy steel housing, complete with backbox, hinged steel door with cylinder lock, and surface mounting provisions. The cabinet shall be painted beige.
2. Control Panel Modules: Provide power and control modules to perform all functions of the FACP. Provide audible signals to indicate any alarm, supervisory or trouble condition. The alarm signals shall be different from the trouble signal. Connect all circuit conductors entering or leaving the panel to screw-type terminals with each terminal marked for identification.
3. Silencing Switches: Provide an alarm silence switch at the FACP which will silence the audible signal but not affect the visual alarm indicator. Provide trouble and supervisory silencing switch which will silence the audible trouble and supervisory signal, but not extinguish the visual indicator. This switch shall be overridden upon activation of a subsequent alarm.
4. Fire Alarm Message: A fire alarm shall activate notification appliance circuits. Audible appliances shall produce a temporal three tone followed by a voice message which is repeated until the control panel is reset. Automatic messages shall be broadcast through speakers, but not in stairs. A live voice message shall override the automatic audible output through use of a microphone input at the control panel. When using the microphone, live messages shall be broadcast through speakers in stairs, in elevator cabs, and throughout a selected floor or floors. The system shall be capable of operating all speakers at the same time. Messages shall utilize a female voice and shall match existing.
5. Memory: The control panel shall have the ability to store a minimum of two hundred (200) events in a log stored in a battery-protected memory.
6. Service Mode: The FACP shall have a service mode to permit the arming and disarming of individual detection or output devices as well as the manual operation of output devices. Status of these devices shall be displayed upon command or printed on a printer. FACP shall remain 100 percent operational and capable of responding to an alarm condition while in the routine maintenance mode. The FACP shall automatically return to the normal mode after a predetermined time (1 hour) in the event the panel remains unattended in the service mode.
7. Field Programmability: Provide control units and control panels that are fully field programmable for control, initiation, notification, supervisory and trouble functions

of both input and output. The system program configuration shall be menu driven. All system changes shall be password protected.

8. Input/Output Modifications: The FACP shall contain features which allow the bypassing of input devices from the system or the modification of system outputs. These control features shall consist of a panel mounted keypad. Any bypass or modification to the system shall indicate a trouble condition on the FACP.
9. Resetting: Provide the necessary controls to prevent the resetting of any alarm, supervisory, or trouble signal while the alarm, supervisory or trouble condition on the system still exists.
10. Walk Test: The FACP shall have a walk test feature. When using this feature, operation of initiating devices shall result in limited system outputs, so that the notification appliances operate for only a few seconds and the event is indicated on the system printer, but no other outputs occur.

E. Electric Power:

1. Primary Power: Provide primary power for the FACP from the normal AC service to the building where shown on the drawings. Make the 120 VAC service connection for the FACP and power extender panels at the locations indicated. Provide a red and white engraved plastic sign permanently affixed to the FACP identifying the power service location, panel, and breaker.
2. Emergency Power Supply: Provide for system operation in the event of primary power source failure. Transfer from normal to auxiliary (secondary) power or restoration from auxiliary to normal power shall be automatic and shall not cause transmission of a false alarm.
 - a. Batteries: Provide rechargeable, maintenance-free, lead-acid gelled electrolyte sealed batteries as the source for emergency power to the FACP. Batteries shall contain suspended electrolyte. House batteries in a separate battery cabinet. Batteries shall be marked with the month and year of manufacture.
 - b. Capacity: Provide the batteries with sufficient capacity to operate the system under supervisory and trouble conditions, including audible trouble signal devices for 24 hours and audible and visual signal devices under alarm conditions for an additional 15 minutes.
 - c. Battery Charger: Provide a solid state, fully automatic, variable charging rate battery charger. The charger shall be capable of providing 150 percent of the connected system load and shall maintain the batteries at full charge. In the event the batteries are fully discharged the charger shall recharge them back to full charge within 48 hours. Provide pilot light to indicate when batteries

are manually placed on a high rate of charge as part of the unit assembly if a high rate switch is provided.

- F. Amplifiers: Any amplifiers, message storage, and all other hardware necessary for a complete, operational textual audible circuit conforming to NFPA 72 shall be housed in a remote fire alarm control unit, terminal cabinet, or in the fire alarm control panel. The system shall automatically operate and control all building fire alarm speakers except those installed in the stairs and within elevator cabs. The speakers in the stairs and elevator cabs shall operate only when the microphone is used to deliver live messages.
1. Backup amplifier: Provide backup amplifier sufficient to take the place of the largest amplifier in the system.
 2. Inputs: Each system shall be equipped with pre-recorded messages and panel mounted microphone. Microphone inputs shall be of the low impedance, balanced line type. Both microphone and system messages shall be operational on any amplifier.
 3. Outputs: All audio circuits shall be synchronized.
 4. Protection Circuits: Each amplifier shall be constantly supervised for any condition which could render the amplifier inoperable at its maximum output. Failure of any component shall cause automatic transfer to a designated backup amplifier, illumination of a visual "amplifier trouble" indicator on the control panel, appropriate logging of the condition on the system printer and other actions for trouble conditions as specified.
- G. Addressable Interface Devices: The addressable monitor device shall provide an addressable input interface to the FACP for monitoring normally-open or normally-closed contact devices such as alarm pressure switches, waterflow switches, valve supervisory switches, fire pump monitoring, independent smoke detection systems, etc. The addressable control device shall provide an addressable output interface to the FACP for control of elevator recall, door releasing, solenoid activation, etc.
1. Addressable Monitor Modules: Addressable Monitor Module shall be provided to connect supervised conventional initiating device or zone of supervised conventional initiating devices, including but not limited to water flow and alarm pressure switches, valve tamper switches, low pressure switches, manual release stations, heat detectors, and other such devices. Monitor module shall be mounted in a 4inch square, 2-1/8 inch deep electrical box and shall be capable of Class B supervised wiring to the initiating device. Monitor module shall contain an integral LED that flashes each time the monitor module is polled.
 2. Addressable Control Modules: Addressable Control Module shall be provided to connect supervised conventional notification device or zone of notification devices that require an external power supply, such as audio-visual alarms. The control

module shall be capable of operating as a relay (dry contact Form C), to control auxiliary functions. The module shall be mounted in a 4 inch square, 2-1/8 inch deep electrical box and shall be capable of Class B supervised wiring to the indicating or control device. Module shall contain an integral LED that flashes each time the module is polled.

3. Isolation Modules: Provide isolation modules to isolate wire-to-wire short circuits on a loop and limit the number of other modules or sensors that are incapacitated by the short circuit fault. Place isolator modules at signaling line circuit T-taps where the T-tap will contain more than 5 addressable devices, and located such that not more than 30 addressable devices are connected between isolation modules. If a wire-to-wire short occurs, the module shall automatically open the circuit. On repair of the short, the module shall automatically reconnect the isolated section of the signaling line circuit. The module shall be mounted in a 4 inch square, 2-1/8 inch deep electrical box. Module shall contain an integral LED that flashes each time the module is polled and illuminates steadily to indicate that a short has been detected and isolated.

H. Smoke Detectors:

1. Photoelectric Smoke Sensors: Provide addressable photoelectric smoke sensors as follows:
 - a. Provide analog photoelectric smoke sensors utilizing the photoelectric light scattering principle for operation. Smoke sensors shall be listed for use with the fire alarm control panel.
 - b. Provide companion mounting base with fixed wiring terminals. Terminate field wiring on the fixed terminals.
 - c. Sensors shall include alarm LED which flashes under normal conditions, indicating that the sensor is operational and in regular communication with the control panel. LED to be placed into steady illumination by the control panel when the sensor is in alarm.
2. Duct Smoke Detectors: Sensors in ducts shall be photoelectric type and listed by UL FPED or FM P7825 for duct installation. Duct sensors shall be provided with approved duct housing, mounted exterior to the duct, and shall be provided with perforated sampling tubes extending across the width of the duct. Activation of sensors shall cause shutdown of the associated air-handling unit, annunciation at the control panel and shall not cause sounding of the building interior alarm devices.

- I. Manual Stations: Provide addressable noncoded type with mechanical tool-less reset feature. Locate stations as indicated. Stations shall be surface-mounted. Surface-mounted boxes shall be painted the same color as the alarm station. Provide each station with screw-type terminals of proper number and type to perform functions required. Break-glass-front stations and pull-lever, break-glass-rod type are not

acceptable. Provide manual station guard covers equipped with an audible alarm and a tamperproof latch which may be opened for testing or resetting after the station has been operated for fire drills.

J. Notification Appliances:

1. Visual Notification Appliances: Provide surface-mounted lamp assembly suitable for use in an electrically supervised circuit. Provide lamps of the flashing stroboscopic type, powered from the control panel alarm circuit. Lamps shall produce a minimum of 15 candela or as indicated on the drawings. All visual alarms shall be synchronized.
2. Fire Alarm Speakers: Provide fire alarm speakers conforming to UL 464 having a minimum of three (3) tap settings and separate terminations for each "in" and "out" connection. Tap settings shall include taps of 1/4, 1/2 and 1 watt minimum. Speakers shall initially utilize the 1/2 watt tap in the system. Speakers shall have an output rating of 84 dBA at 10 feet as determined by the reverberant room test; data on peak output as determined in an anechoic chamber is not suitable. All speakers shall be capable of installation on standard 4 inch square electrical boxes. Where speakers and strobes are provided in the same location, they may be combined into a single wall mounted unit.
3. Connections: Provide screw terminals for each notification appliance. Terminals shall be designed to accept the size conductors used in this project without modification.

K. Fire Alarm Power Extender Panels: Fire alarm power extender panel shall comply with the applicable requirements of UL 864. Panel shall be modular, installed in a surface-mounted steel cabinet with hinged door and cylinder lock. The extender panel(s) shall have the necessary components and equipment required to provide a minimum of four supervised, Class B, notification appliance circuits. Each appliance circuit shall be rated for 1.5 amperes at 24 volts DC. An alarm signal from the FACP will initiate the notification appliance circuits to extend the alarm. Primary power for the panel shall be 3 amperes at 120 volts AC. Standby power shall be same as FACP and charger shall be housed integrally within the cabinet.

L. System Wiring: Provide wiring materials under this section as specified in Division 16 with the additions and modifications specified herein.

1. Wiring Within Cabinets, Enclosures, Boxes, Etc.: Provide wiring installed in a neat and workmanlike manner and installed parallel with or at right angles to the sides and back of any box, enclosure or cabinet. All conductors which are terminated, spliced, or otherwise interrupted in any enclosure, cabinet, mounting or junction box shall be connected to terminal blocks. Mark each terminal in accordance with the wiring diagrams of the system. Make all connections with approved pressure type terminal blocks, which are securely mounted.

2. Terminal Cabinets: Provide a terminal cabinet at the base of any circuit riser and where indicated on the drawings. Terminal size shall be appropriate for the size of the wiring to be connected. All conductor terminations shall be labeled and a drawing containing all conductors, their labels, their circuits and their interconnection shall be permanently mounted in the terminal cabinet. Minimum size is 8 inches high by 8 inches wide.
3. Above Grade Alarm Wiring: Conductors shall be Type THHN/THWN. Type TW is not permitted. Signaling line circuits and initiating device circuit field wiring shall be twisted pair No. 18 to No. 12 AWG, depending on distance and per manufacturer's recommendations. Visual alarm signal and audible appliance circuits shall be single solid copper No. 14 AWG size conductors at a minimum. Speaker circuits shall be solid copper No. 16 AWG size conductors at a minimum. Wire size shall be sufficient to prevent voltage drop problems. Power wiring, operating at 120 VAC minimum, shall be No. 12 AWG solid copper having similar insulation. Provide wiring in electrical metallic tubing in dry locations not enclosed in concrete or where not subject to mechanical damage. Provide rigid conduit in all other locations. Conceal conduit in finished areas of new construction and wherever practicable in existing construction. The use of flexible conduit not exceeding a 6 foot length shall be permitted in initiating device circuits. The minimum conduit size shall be 0.75 inch. Shielded wiring shall be utilized where recommended by the manufacturer. For shielded wiring, the shield shall be grounded at only one point, which shall be in or adjacent to the FACP. T-taps are permitted in Class B circuits with interconnections occurring on terminal strips. Circuits to smoke control systems, fan shutdown systems, door locking systems, etc. shall terminate in terminal cabinets within 3 feet of the controllers for those systems. The completion of those circuits from the terminal cabinets to the appropriate system shall be provided under the appropriate Division.
4. Conductor Terminations: Labeling of any circuit at terminal blocks in terminal cabinets, FACP, and remote fire alarm control units shall be provided at each conductor connection. Each conductor or cable shall have a shrink-wrap label to provide a unique and specific designation. Each terminal cabinet, FACP and remote fire alarm control unit shall contain a laminated drawing which indicates each conductor, its label, circuit and terminal. The laminated drawing shall be neat, use a minimum 12point font size for lettering, and be mounted within each cabinet, panel or unit so that it does not interfere with the wiring or terminals. Maintain existing color code scheme where connecting to existing equipment.
5. Below Grade Direct Burial Type Cables:
 - a. Below grade fire alarm wiring shall be direct burial unshielded multi-conductor type PVC-jacketed cable with #14 AWG and/or larger Type XHHW.

- b. Multi-conductor cable shall be UL listed, Type TC cable conforming to National Electrical Code Article 340.
 - 1) Copper conductors shall be concentric stranded, class B (7 strands).
 - 2) Insulation shall be PVC or nylon with an overall PVC jacket.
 - 3) Cable Conductor number and color coding shall be as shown on the plans.
 - 4) Green, white, and gray colored conductors shall not be used.
 - c. Below grade twisted pair or twisted shielded pair cable shall be direct burial TC type with minimum #18 AWG conductors.
6. Frame for Operating Instructions: The frame material shall be welded stainless steel, with clear UV resistant plexiglass. Instructions shall be typewritten.
7. Cable Markers:
- a. Rectangular, commercially available polyethylene cable tags with pre-punched holes at each corner for the attachment with self-locking ties.
 - b. Minimum 0.035-inch thick.
 - c. Average Tensile Strength: 4500 pounds psi.
 - d. Non-corrosive, non-conductive, resistant to acids, alkalis, organic solvents, salt water and distortion-resistant in temperatures up to 300 degrees F.
 - e. White or yellow and machine printed with the phrase "Fire Alarm Cable - Buildings A to E" in black block letters 1/8" or larger in vertical height. Handwritten markers are not acceptable.
 - 1) The preprinting shall be permanent and shall not fade or dissolve.
 - 2) The tags shall be suitable for marking with black permanent markers. There shall also be space available for additional notes (for maintenance / service contractor use only).
8. Cable and Conductor Ties: One-piece, self-locking nylon ties having a minimum loop tensile strength of 175 pounds and resistance to the same conditions as cable marker.
9. Nameplates: Provide metallic and/or phenolic noncorrosive and non-heat sensitive nameplates for:

- a. Fire Alarm Control Panel: The nameplates shall be factory installed, securely mounted inside the fire alarm panel with machine screws or glue, and shall also be accessible and visible. Information on the nameplates shall be 1/8" or larger lettering stamped or engraved with the following:
 - 1) Manufacturer's name and address.
 - 2) Model Number.
 - 3) Serial Number.
 - 4) Date of Manufacture.
 - 5) Manufacturer's drawing number (if available).
 - b. Subpanels and Modules: The nameplates shall be securely mounted on the Subpanels and/or module with machine screws or glue and include the following information:
 - 1) Subpanel and/or module model and/or type number.
 - 2) Catalog number.
10. Corrosion and Fungus Protection: Metallic equipment shall be coated with a rust inhibiting treatment and standard finish per the manufacturer's standard. Components shall be protected against corrosion and fungus (e.g. circuit boards shall be epoxy coated).

PART 3 - EXECUTION

3.01 EXAMINATION OF THE DRAWINGS AND SPECIFICATIONS

- A. Confirm and coordinate voltages and requirements of equipment furnished by other trades, which will be connected to the fire alarm system, such as detectors and dampers. Include the above information on the field-post as-built drawings.

3.02 EXAMINATION OF EXISTING SITE CONDITIONS

- A. Cabinets, panels, annunciators, outlets, pull stations, audio / visual devices and other equipment and devices shall be installed in the locations and heights shown on the drawings and/or as specified herein.
 1. The location of the equipment and devices shown on the plans are approximate. Before installing, the Contractor shall study adjacent construction, verify all dimensions and sizes of equipment at the job site and perform installation in what is deemed to be the most logical manner.

2. Any changes from the locations shown on the drawings must be approved by the Contracting Officer and shown on the "field-posted as-built" drawings.
 3. Any device may be relocated within 10' 0" before installation at the direction of Contracting Officer without additional charge to State.
- B. The Contractor shall determine the location of existing cables and record their route on the field-posted as-built drawings.

3.03 INSTALLATION

- A. Protect dissimilar metals with approved fittings and treatment.
- B. Coat steel conduits installed underground with an approved asphaltic paint or plastic coating, or wrap with a single layer of a pressure sensitive plastic tape, half-lapped. Do not use aluminum in contact with the earth.
- C. All metallic conduits and boxes shall be grounded with a green wire ground conductor.
- D. Equipment Installation: Equipment, materials, installation, workmanship, inspection, and testing shall be in accordance with NFPA 70, NFPA 72, and as modified herein.
 1. FACP: Locate the FACP where indicated on the drawings. Surface mount the enclosure with the bottom of the cabinet 4 feet above the finished floor. All conductor terminations shall be labeled and a drawing containing all conductors, their labels, their circuits and their interconnection shall be permanently mounted in the FACP.
 2. Manual Stations: Locate manual stations where shown on the drawings. Mount stations so that their operating handles are 4 feet above the finished floor. Manual stations shall be provided with covers with an audible tamper alarm.
 3. Notification Appliance Devices: Locate notification appliance devices where shown on the drawings. Mount visual notification on walls between 80 and 96 inches above the finished floor or 6 inches below the ceiling whichever is lower. Mount audible notification on walls 90 inches measured to the top of the device.
 4. Smoke Detectors: Locate detectors as shown on the drawings on a 4 inch mounting box. Detectors located on the ceiling shall be installed not less than 4 inches from a side wall to the near edge. Those located on the wall shall have the top of the sensor/detector at least 4 inches below the ceiling, but not more than 12 inches below the ceiling. Install smoke detectors no closer than 3 feet from air handling supply outlets.

E. Cables and Conductors:

1. Below Grade Cable Installation: Cable shall be installed as indicated on the drawings.
 - a. Conduits shall be sloped as noted on the drawings to provide drainage at handholes and manholes.
 - b. Cables shall not be installed in the same ducts, conduits, handholes, etc. with non-fire alarm circuits.
2. Above Grade Conductor Installation:
 - a. Conductors shall not be installed in the same conduits, ducts, junction boxes, etc. with non-fire alarm circuits. 120 volt AC fire alarm circuit conductors shall not be contained within the same multi-conductor cable nor installed with cables and other conductors in the same conduits, ducts, enclosures, junction boxes, etc. with 24 volt DC fire alarm circuits.
 - b. Conductors shall be installed in continuous lengths. Splices shall be made in above ground junction boxes by terminating wires with terminal blocks.
 - c. Cable pulling tensions shall not exceed manufacturers' recommended pulling tensions.
 - d. Wire-nut connectors: Not permitted
3. Conductor Color Code: Conductors shall be provided with color coding. Color coding shall be maintained throughout the circuit and documented on the as-built drawings.

F. Cable and Conductor Terminations and Dress. The following requirements shall apply to terminal cabinets, junction and outlet boxes larger than 12" x 12":

1. Electric equipment shall be installed in a neat and workmanlike manner in accordance with NEC 373 7, Space in Enclosures.
2. Cable conductors or individual conductors shall be bundled, dressed and held together with cable straps, ties or lace and fanned in a manner that equipment terminals are visible and accessible, and allow the connections to be removed and reconnected without moving a large number of wires.
 - a. Conductors to screw type connectors shall be terminated with wire lugs or with approved cable termination connectors compatible with the specific termination.

- b. A minimum of 6 inch excess length shall be provided for conductors from the bundles to the connectors using avibration loop as described by NEC 300-14.
 - c. Conductors shall be labeled as specified herein.
3. Cross-connected conductor pairs in junction and device outlet boxes or cabinets will not require bundling and cable straps, ties or lace but shall be neatly installed with a minimum of 6 inches of excess length so conductors can be easily traced between terminals. Label all conductors as specified herein.
 4. Cabinets, junction boxes, outlet boxes, other boxes, shall have sufficient space to accommodate all conductors installed in them without crowding.
 5. Completed work shall be uncrowded and uncluttered and shall allow accessibility without cutting and/or removing of any straps, ties, laces, cables, components, devices, brackets, modules, equipment and like items.
 6. Cables shall be secured to junction boxes, equipment cabinet backboards, console members or to other system components using cable clamps and wraps. Provide cable support posts as required to facilitate system installation.

G. Cable and Conductor Identification System

1. Underground Cable Markers:
 - a. Provide markers at both ends of the cables and at all intermediate locations where the cables are accessible and visible.
 - b. Each marker shall be secured with two (2) nylon ties.
2. Conductor Markers:
 - a. Provide markers at ends of each conductor connected to the control panels and terminal cabinets at each building.
 - b. Attach markers a minimum of four (4) inches from the ends of conductors in a manner that will not permit accidental detachment.
3. Signaling Line Circuits: Signaling line circuits shall be labeled by circuit number as shown on the drawings. Conductors shall be labeled in the fire alarm panel(s), the building's main fire alarm junction box and termination cabinet.
4. Audible and Visual Notification Circuits: Notification circuits shall be labeled by signaling circuit number as shown on the drawings. Conductors shall be labeled in the fire alarm panel(s) and in the building's fire alarm termination cabinet.

H. Framed Map: When a system services multiple buildings, a framed map drawn at a minimum scale of 1"=40', showing buildings, panels, and the location of initiating

devices shall be printed on a white background, and permanently mounted adjacent to the main fire alarm annunciator-control panel.

- I. Framed Operating Instructions: A framed set of operating instruction printed on a white background Main Fire Alarm Panel Operating Instructions shall be provided. The framed instructions shall be permanently mounted adjacent to the main fire alarm annunciator-control panel.
- J. Field Painting:
 1. Clean, pretreat, prime, and paint new fire alarm components, conduit, miscellaneous metalwork, and accessories. Apply coatings to clean dry surfaces using clean brushes. Clean the surfaces to remove dust, dirt, rust and loose mill scale. Immediately after cleaning, provide the metal surfaces with one coat of pretreatment primer applied to a minimum dry film thickness of 0.3 mil, and one coat of primer applied to a minimum dry film thickness of one mil. Provide primed surfaces with the following:
 - a. Unfinished Areas: Unfinished areas are defined as attic spaces, spaces above suspended ceilings, crawl spaces, pipe chases, and spaces where walls or ceiling are not painted or not constructed of prefinished material. Provide primed surfaces with one coat of red enamel applied to a minimum dry film thickness of one mil.
 - b. Exterior and Other Areas: Provide primed surfaces with two coats of paint to match adjacent surfaces.
 2. Touch-up: Touch-up painted surfaces and fire alarm system components damaged during installation to match the existing or specified paint and color.
- K. Disconnection and Removal of Existing System: Fire alarm control panels and fire alarm devices not connected to the new system shall be disconnected and removed. Contact the Contracting Officer to determine if any of the existing equipment shall be salvaged.
 1. The existing fire alarm and smoke detection system shall remain in operation at all times during the installation and commissioning of the new system. The Contractor shall take precautions to avoid any accidental activation of the existing fire alarm system. When making modifications to the existing systems, the Contractor shall minimize the time the existing system is out of service. Prior to any impairment of the existing system the Contractor shall notify the State and County Fire Department. The Contractor shall comply with 29 CFR 1910.36 and 29 CFR 1910.37. No impairment shall exceed 8 hours. The Contractor shall establish a fire watch to monitor the impaired area until the entire fire alarm system is returned to full operation. The Contractor shall schedule outages 30 days in advance. Once this new system is on-line and accepted by the State, remove the old system. As new

equipment is installed, label it "NOT IN SERVICE". Upon acceptance, remove labels.

2. Disconnect and remove the existing fire alarm and smoke detection systems where indicated and in the specification.

L. Connection of New System: The following new system connections shall be made during the last phase of construction, at the beginning of the preliminary tests. New system connections shall include:

1. Connection of new control modules to existing magnetically held smoke door (hold-open) devices.
2. Connection of new system monitoring to existing fire alarm monitoring service.

Once these connections are made, system shall be left energized and new audio/visual devices activated. Report immediately to the State, coordination and field problems resulting from the connection of the above components.

M. Firestopping: Provide UL listed firestopping for all holes at conduit penetrations through floor slabs, fire rated walls, partitions with fire rated doors, corridor walls, and vertical service shafts.

3.04 TESTING

A. Testing Of The New Fire Alarm System:

1. After completion of the fire alarm system's installation, turn on and leave the system on for a minimum of three (3) consecutive weeks to demonstrate that the new work done by the contractor operates, meets the requirements of the specifications and does not affect the operation of the entire fire alarm system.
2. Upon successful completion of the three (3) week operational period, arrange with the Contracting Officer for a pre-final fire alarm system test and inspection. The test and inspection shall demonstrate that all the Contractor installed fire alarm system equipment, devices cables and conductors are operating acceptably and have been installed in accordance with this specification.

Accordingly, the test demonstrates that the system is ready for a final test of the overall fire alarm system.

Representatives at the prefinal test shall include the Contractor, fire alarm system manufacturer's representative, user, the user's facility maintenance agency personnel, F.A. system design consultant, and the Contracting Officer. Representatives at the Final test shall include all the foregoing representatives and the County Fire Department Inspector.

3. Preliminary Test Results: Include the control panel and initiating and indicating devices, a unique identifier for each device with an indication of test results, and signature of the factory-trained technician of the control panel manufacturer and equipment installer. With reports on preliminary tests, include a hard copy of printer output information from preliminary testing, i.e. download historical file so that all test data is available for State review.
 - a. Tests:
 - 1) Dielectric Strength and Insulation Resistance Tests: Test the dielectric strength and the insulation resistance of the system interconnecting wiring by means of an instrument capable of generating 500 volts dc and equipped to indicate leakage current in 1000 megohms. For the purpose of this test, the instrument shall be connected between each conductor on the line and between each conductor and ground at the control panel end of the line, with the other extremity open circuited and all series-connected devices in place. The system shall withstand the test without breakdown and shall indicate a resistance of not less than 500,000 ohms, the measurement being taken after an electrification of not more than 1.0 minute with a dc potential of not less than 100 volts nor more than 550 volts. The tests shall be witnessed by the Inspector and test results recorded for use at the final acceptance test.
 - 2) Loop Resistance Tests: Measure and record the resistance of each circuit with each pair of conductors in the circuit short-circuited at the farthest point from the circuit origin. The tests shall be witnessed by the Inspector and test results recorded for use at the final acceptance test. Loop Resistance Tests: Measure and record the resistance of each circuit with each pair of conductors in the circuit short-circuited at the farthest point from the circuit origin. The tests shall be witnessed by the Inspector and test results recorded for use at the final acceptance test.
 - 3) Ground Resistance Tests: Measure the resistance of each connection to ground. Ground resistance shall not exceed 5 ohms. The tests shall be witnessed by the Inspector and test results recorded for use at the final acceptance test.
 - 4) Smoke Detector Tests: Prior to formal inspection and tests, clean and perform sensitivity tests on each smoke sensor. Clean the smoke sensors in accordance with the manufacturer's recommended procedures.
 - 5) Preliminary Testing: Conduct preliminary tests to ensure that all devices and circuits are functioning properly. Tests shall meet the

requirements of paragraph entitled "Minimum System Tests" of this section. After preliminary testing is complete, provide a letter certifying that the installation is complete and fully operable to the State a minimum of 7 calendar days before the formal acceptance test date required in the paragraph below. Without the submission of this report, the final acceptance test is automatically canceled.

- b. Formal Acceptance Testing: Notify the State in writing when the system is ready for final acceptance testing. Submit request for test at least 15 calendar days prior to the test date. A final acceptance test will not be scheduled until the O&M Manuals are submitted and the following are provided at the job site:
- 1) Marked-up red line drawings of the system as actually installed
 - 2) Dielectric strength and insulation resistance test results
 - 3) Loop resistance test results
 - 4) Complete program printout including all input/output addresses
 - 5) An electronic copy of the entire software program for the system
 - 6) A list of passwords permitting access by designated State employees to all levels of the software programs(s).

The final tests shall be witnessed by the County Fire Department or the Authority Having Jurisdiction (AHJ). At this time, any and all required tests shall be repeated according to the AHJ. Following acceptance of the system, as-built drawings and Operation and Maintenance (O&M) Manuals shall be submitted for review and acceptance. In existing buildings, the transfer of devices from the existing system to the new system and the permission to begin demolition of the old fire alarm system will not be permitted until the as-built drawings and O&M Manuals are received.

- c. Minimum System Tests: Test the system in accordance with the procedures outlined in NFPA 72, Chapter 14. The required tests are as follows:
- 1) Verify the absence of unwanted voltages between circuit conductors and ground. The tests shall be accomplished at the preliminary test with results available at the final system test.
 - 2) Verify that the control unit is in the normal condition as detailed in the manufacturer's operating and maintenance manual.
 - 3) Test each initiating and indicating device and circuit for proper operation and response at the control unit.

- 4) Test the system for all specified functions in accordance with the contract drawings and specifications and the manufacturer's operating and maintenance manual.
 - 5) Test both primary power and secondary power. Verify, by test, that the secondary power system is capable of operating the system for the time period and in the manner specified.
 - 6) Determine that the system is operable under trouble conditions as specified.
 - 7) Visually inspect all wiring.
 - 8) Test the battery charger and batteries.
 - 9) Verify that all software control and data files have been entered or programmed into the FACP. Hard copy records and two identical diskette copies of the software and data files shall be provided to the Contracting Officer.
 - 10) Verify that red-line drawings are accurate.
 - 11) Measure the current in circuits to assure there is the calculated spare capacity for the circuits.
 - 12) Disconnect the verification feature for smoke sensors during tests to minimize the amount of smoke or test gas needed to activate the sensor.
 - 13) Measure the voltage drop at the most remote appliance on each notification appliance circuit.
 - 14) Measure and record the ambient sound pressure level and the alarm sound pressure levels in each area or room. Tests shall be conducted with the door closed.
 - 15) For existing systems that are altered, all new devices shall be tested and a minimum of 10 percent of the existing devices must be tested to confirm the existing functions were not altered. If the system executive software was altered, a minimum of 10 percent of all devices including one of each input and output type must be tested.
4. Contractor shall be responsible for notifying the AHJ and Fire Department of formal acceptance testing
 5. In addition to satisfactory acceptance tests of the contractor's new work, the entire fire alarm system must be accepted and certified by the County Fire Department or

AHJ before commencement of the specified system warranty period with full maintenance responsibility.

The tests must demonstrate that the entire facility fire alarm system is operating in order to receive the Fire Department Certification.

6. If requested by the Contracting Officer, isolate the contractor's new work from the overall system and demonstrate that the new work does not affect the operation of the overall fire alarm system and shall repeat tests at no additional cost to the State.
- B. Concealed Work: Concealed work re-opened and re-closed at random during the formal inspection as requested by the Contracting Officer shall be done at no additional cost to the State.
- C. Testing Tools and Equipment: The Contractor shall provide the tools and equipment, including handheld radios, etc. necessary to accomplish the testing.

3.05 TRAINING

- A. Conduct training and instruction for the operating and maintenance staff, as designated by the Contracting Officer, on the operation of the fire alarm panel and system.
- B. The training session shall be conducted during normal business hours, and shall last as long as necessary to properly instruct the staff, but not less than 1-hour.
- C. Instruction shall include hands-on training in routine operations and queries (reading of normal status and trouble status) of the fire alarm system.
- D. Training shall be provided for the new fire alarm system and additional circuits and devices.
- E. Instruction shall include operations and query of system status, etc.; and hands-on training in the procedures and process for operations and obtaining system status, trouble and other functional information to determine when to call for repairs and how to report the type of trouble encountered.

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

- A. Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the price bid for the various items of work in this project.

END OF SECTION

DIVISION 16 - ELECTRICAL

SECTION 16050 - GENERAL ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

The General Provision of the contract, including the General Provisions for Construction Projects (2016) and General Requirements of the Specifications, apply to the work specified in this section.

1.02 SYSTEM DESCRIPTION

- A. Provide raceways, wires, cables, connector, boxes, devices, finish plates and the like for a complete and operational electrical system.
- B. Electrical Connections: Connect equipment, whether furnished by Owner or other Divisions of the Contract, electrically complete.
- C. Supporting Devices: Safety factor of 4 required for every fastening device or support for electrical equipment installed. Support to withstand four times weight of equipment it supports. Provide seismic bracing per IBC requirements for this building location.
- D. Provide a fiber optic system with multimode fiber compatible with existing fiber infrastructure. Provide connecting hardware and termination equipment in accordance with TIA-606 for a complete and operational system.

1.03 SUBMITTALS

- A. Provide shop drawings and product data for the following:
 - 1. Raceways.
 - 2. Wires, cables and connectors.
 - 3. Outlet boxes.
 - 4. Devices and plates.
 - 5. Circuit breakers.
 - 6. Identification equipment.
 - 7. Fiber optic cables.

1.04 REGULATORY REQUIREMENTS

- A. Conform to the latest adopted version of the National Electric Code (NEC), with state and city and county amendments.
- B. Furnish products listed by UL or other testing firm acceptable to AHJ.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Wires and Cables: Carol, General Cable, Okonite, Southwire, or approved.
- B. Connectors: Stranded conductors by Anderson, Burndy, IlSCO, Thomas & Betts, or approved.
- C. Splices:
 - 1. Branch Circuit Splices: Ideal, Scotch-Lock, 3M, or approved.

2.02 RACEWAYS

- A. Conduits:
 - 1. Galvanized Rigid Steel Conduit (RMC): Hot-dip galvanized after thread cutting. Manufacture in conformance with ANSI C80.1.
 - 2. Electrical Metallic Tubing (EMT): Hot-dip galvanized, and chromate coated. Manufacture in conformance with UL 797 and ANSI C80.3.
- B. Conduit Fittings:
 - 1. Bushings: Malleable iron with plastic insulator lining, 150C rated.
 - 2. Ground Bushings: Malleable iron with plastic insulating liner and aluminum grounding lug rated for copper or aluminum conductor, 150C rated.
 - 3. EMT Connectors and Couplings:
 - a. Set Screw Type: Zinc plated steel, insulated throat connectors.
 - b. Compression Type: Zinc plated steel, insulated throat connectors, raintight up to 2 inches.
 - 4. Rigid Steel Conduit Ells: PVC coated or painted with No. 51 bitumastic material, long radius ells, minimum radius of 36 inches.

5. Expansion/Deflection Fittings:
 - a. EMT: Use O-Z Gedney Type TX.
 - b. RMC: Use O-Z Gedney Type AX, DX and AXDX.

2.03 WIRES AND CABLES

- A. Copper, 600 volts rated throughout. Conductors 14AWG to 10AWG, solid or stranded. Conductors 8AWG and larger, stranded. Phase color to be consistent and match existing at feeder terminations; A-B-C, top to bottom, left to right, front to back. Insulation types THWN-2 or XHHW-2. Minimum insulation rating of 90C for branch circuits.

2.04 CONNECTORS

- A. Copper Pads: Drilled and tapped for multiple conductor terminals.
- B. Lugs: Compression type for use with stranded branch circuit or control conductors; mechanical lugs not acceptable. Manufacturers: Anderson, IlSCO, Panduit, Thomas & Betts, 3M, or approved.
- C. Conductor Branch Circuits: Wire nuts with integral spring connectors for conductors 18 through 8AWG. Push-in type connectors where conductors not required to be twisted together are not acceptable. Manufacturers: 3M, Ideal, or approved.

2.05 50/125 MICROMETER, MULTIMODE, OPTICAL FIBER CABLE (OM2)

- A. Description: Multimode, 50/125-micrometer, 6-fiber, nonconductive, tight buffer, optical fiber cable.
- B. Standards:
 1. Comply with ICEA S-83-596 for mechanical properties.
 2. Comply with TIA-568-C.3 for performance specifications.
 3. Comply with TIA-492AAAB for detailed specifications.
- C. Maximum Attenuation: 3.50 dB/km at 850 nm; 1.5 dB/km at 1300 nm.
- D. Minimum Overfilled Modal Bandwidth-length Product: 500 MHz-km at 850 nm; 500 MHz-km at 1300 nm.
- E. Jacket:
 1. Jacket Color: Orange.

2. Cable cordage jacket, fiber, unit, and group color shall be according to TIA-598-D.
 3. Imprinted with fiber count, fiber type, and aggregate length at regular intervals not to exceed 40 inches.
- F. Listed and labeled by an NRTL acceptable to authorities having jurisdiction as complying with UL 444, UL 1651, and NFPA 70 for the following types:
1. Plenum Rated, Nonconductive: Type OFNP, complying with NFPA 262.
 2. Plenum Rated, Nonconductive: Type OFNP in listed plenum communications raceway.
 3. Plenum Rated, Nonconductive: Type OFNP, or Type OFNR in metallic conduit.
 4. Plenum Rated, Nonconductive: Type OFNP, complying with NFPA 262; Type OFNP in listed plenum communications raceway; or Type OFNP, or Type OFNR in metallic conduit.

2.06 BOXES

- A. General: Provide box accessories as required for each installation, including mounting brackets, wallboard hangers, extension rings, luminaire studs, cable clamps and metal straps for supporting boxes, compatible with boxes used and meeting requirements of individual wiring situations.
- B. Junction and Pull Boxes: Provide ANSI49 gray enamel painted sheet steel junction, pull boxes, with screw-on covers; of the type shape and size, to suit each respective location and installation; with welded seams, and equipped with steel nuts, bolts, screws and washers. Circle AW, Hoffman, or approved.
- C. Conduit Fittings: Provide corrosion-resistant punched-steel box knockout closures, conduit locknuts and plastic conduit bushings of the type and size to suit each respective use and installation. O-Z Gedney, Thomas & Betts, or approved.

2.07 SUPPORTING DEVICES

- A. Hangers: Kindorf B-905-2A channel, H-119-D washer, C105 strap, 3/8-inch rod with ceiling flange.

2.08 ELECTRICAL IDENTIFICATION

- A. Engraved Labels: Melamine plastic laminate, white with black core, 1/16 inch thick, manufactured by Lamicoid. Engravers standard letter style, minimum 3/16-inch high letters, capitals. Drill or punch labels for mechanical fastening except where adhesive mounting is necessary because of substrate. Use self-tapping stainless steel screws.

- B. Conductor Numbers: Manufacturers standard vinyl-cloth self-adhesive cable and conductor markers of the wraparound type. Preprinted black numbers on yellow field. Brady, Panduit, or approved.
- C. Branch Circuit Panel Schedules: Provide branch circuit identification schedules, typewritten, clearly filled out, to identify load connected to each circuit and location of load. Numbers to correspond to numbers assigned to each circuit breaker pole position.
- D. Circuit Breaker Identification: Provide permanent identification number in or on panelboard dead front adjacent to each circuit breaker pole position.

PART 3 - EXECUTION

3.01 ELECTRICAL CHARACTERISTICS

- A. Verify electrical characteristics of equipment prior to installation of conduits and wiring for equipment.

3.02 INSTALLATION

A. Conduit:

1. Conduit Joints: Assemble conduits continuous and secure to boxes, panels, luminaires and equipment with fittings to maintain continuity. Provide watertight joints where embedded in concrete, below grade or in damp locations. Seal PVC conduit joints with solvent cement and metal conduit with metal thread primer. Rigid conduit connections to be threaded, clean and tight (metal to metal).
2. Conduit Placement:
 - a. Install continuous conduit and raceways for electrical power wiring and fire alarm system wiring.
 - b. Where exposed conduits are permitted, install parallel or at right angles to building lines, tight to finished surfaces and neatly offset into boxes.
 - c. Do not install conduits or other electrical equipment in obvious passages, doorways, scuttles or crawl spaces, which would impede or block the area passage's intended usage.
 - d. Do not install conduits on surface of building exterior, across roof, on top of parapet walls, or across floors without prior approval of owner.
 - e. Route raceway at least 6 inches from hot surfaces above 120F, including noninsulated steam lines, heat ducts, and the like.

3. Maximum Bends: Install code sized pull boxes to limit sum of bends in a run of conduit to 270 degrees.
4. Conduit Size: Size as indicated on drawings. Where size is not indicated, provide conduit in minimum code permitted size for THW conductors of quantity required for complete operation. Minimum trade size 1/2 inch.
5. Provide pull cord in empty conduits that exceed 10 feet in length or the total sum of bends exceed 90-degree radius.
6. Conduit Use Locations:
 - a. Wet Locations, and Subject to Mechanical Damage: RMC.
 - b. Damp Locations and Locations Exposed to Rain: RMC.
 - c. Dry, Protected: RMC, IMC, EMT.
 - d. Sharp Bends and Elbows: RMC, EMT use factory elbows.
 - e. Install pull wire or nylon cord in empty raceways provided for other systems. Secure wire or cord at each end.
 - f. Elbow for Low Energy Signal Systems: Use long radius factory ells where linking sections of raceway for installation of signal cable.
7. Branch Circuits: Do not change the intent of the branch circuits or controls without approval. Homeruns for 20 amp branch circuits may be combined to a maximum of six current carrying conductors in a homerun. Apply derating factors as required by NEC. Increase conductor size as needed.
8. Unless otherwise indicated, provide raceway systems for conductors.

B. Conduit Fittings:

1. Use setscrew type fittings only in dry locations. When setscrew fittings are utilized, provide insulated continuous equipment ground conductor in conduit, from over current protection device to outlet.
2. Use compression fittings in dry locations, damp and rain-exposed locations. Maximum size permitted in damp locations and locations exposed to rain is 2 inches in diameter.
3. Use threaded type fittings in wet locations, and damp or rain-exposed locations where conduit size is greater than 2 inches.
4. Provide bushing or EMT connector for conduits that do not terminate in box, enclosure, or the like.

5. Provide conduit expansion fittings at building expansion joints and at locations where conduit is exposed to thermal expansion and contraction.
- C. Sleeves and Chases: Provide necessary rigid conduit sleeves, openings and chases where conduits or cables are required to pass through floors, ceiling or walls. Maintain integrity of fire-rated assemblies at penetrations of walls, ceilings or floors.
- D. Conductors, Wires and Cables:
1. Conductor Installation: Install conductors in raceways having adequate, code size cross-sectional area for wires indicated. Install conductors with care to avoid damage to insulation. Do not apply greater tension on conductors than recommended by manufacturer during installation. Use of pulling compounds is permitted. Clean residue from exposed conductors and raceway entrances after conductor installation. Do not use pulling compounds for installation of conductors connected to GFCI circuit breakers or GFCI receptacles.
 2. Conductor Size and Quantity: Install no conductors smaller than 12AWG unless otherwise shown. Provide required conductors for a fully operable system.
 3. Conductors in Cabinets: Hold conductors away from sharp metal edges. Cable and tree wires in panels and cabinets for power and control. Use plastic ties in panels and cabinets. Tie and bundle feeder conductors in wireways of panelboards.

3.03 INSTALLATION OF OPTICAL FIBER BACKBONE CABLES

- A. Comply with NECA 1, NECA 301, and NECA/BICSI 568.
- B. General Requirements for Optical Fiber Cabling Installation:
1. Comply with TIA-568-C.1 and TIA-568-C.3.
 2. Comply with BICSI ITSIMM, Ch. 6, "Cable Termination Practices."
 3. Terminate all cables; no cable shall contain unterminated elements. Make terminations only at indicated outlets, terminals, cross-connects, and patch panels.
 4. Cables may not be spliced. Secure and support cables at intervals not exceeding 30 inches and not more than 6 inches from cabinets, boxes, fittings, outlets, racks, frames, and terminals.
 5. Install lacing bars to restrain cables, to prevent straining connections, and to prevent bending cables to smaller radii than minimums recommended by manufacturer.
 6. Bundle, lace, and train cable to terminal points without exceeding manufacturer's limitations on bending radii, but not less than radii specified in BICSI ITSIMM, "Cabling Termination Practices" Chapter. Use lacing bars and distribution spools.

7. Do not install bruised, kinked, scored, deformed, or abraded cable. Do not splice cable between termination, tap, or junction points. Remove and discard cable if damaged during installation and replace it with new cable.
8. In the communications equipment room, provide a 10-foot-long service loop on each end of cable.
9. Pulling Cable: Comply with BICSI ITSIMM, Ch. 4, "Pulling Cable." Monitor cable pull tensions.
10. Cable may be terminated on connecting hardware that is rack or cabinet mounted.

C. Open-Cable Installation:

1. Install cabling with horizontal and vertical cable guides in telecommunications spaces with terminating hardware and interconnection equipment.
2. Cable shall not be run through structural members or in contact with pipes, ducts, or other potentially damaging items.

D. Boxes:

1. Location: Locate boxes and conduit bodies to ensure accessibility of electrical wiring.
2. Round Boxes: Avoid using round boxes where conduit must enter through side of box, which would result in a difficult and insecure connection with a locknut or bushing on the rounded surface.
3. Anchoring: Secure boxes rigidly to the substrate upon which they are being mounted, or solidly embed boxes in concrete or masonry.
4. Special Application: Provide weatherproof outlets for locations exposed to weather or moisture.
5. Knockout Closures: Provide knockout closures to cap unused knockout holes where blanks have been removed.
6. Outlet System: Provide electrical boxes and fittings as required for a complete installation. Include but not limited to outlet boxes, junction boxes, pull boxes, bushings, locknuts, and other necessary components.
7. Code Compliance: Comply with NEC as applicable to construction and installation of electrical boxes and fittings and size boxes according to NEC, except as noted otherwise.

8. Coordinate electrical device locations (switches, receptacles, and the like) with drawings to prevent mounting devices in mirrors, back splashes, behind cabinets, and the like.

E. Supporting Devices:

1. Verify mounting height of luminaires or items prior to installation when heights are not detailed.
2. Install vertical support members for equipment and luminaires, straight and parallel to building walls. Provide independent supports to structural member for electrical luminaires, materials, or equipment installed in or on ceiling, walls or in void spaces or over furred or suspended ceilings.
3. Do not use other trade's fastening devices as supporting means for electrical equipment, materials or luminaires. Do not use supports or fastening devices to support other than one particular item.
4. Support conduits within 18 inches of outlets, boxes, panels, cabinets and deflections. Maximum distance between supports not to exceed 8 foot spacing.
5. Securely suspend junction boxes, pull boxes or other conduit terminating housings located above suspended ceiling from the floor above or roof structure to prevent sagging and swaying.
6. Provide seismic bracing per NEC requirements for this building location.

F. Electrical Identification:

1. Graphics: Coordinate names, abbreviations and designations used on drawings with equipment labels.
2. Conductor Identification: Apply markers on each conductor for power, control, signaling and communications circuits.
3. Install engraved labels on the inside of flush panels, visible when door is opened. Install label on outside of surface panel.

G. Building Seismic Joints:

1. Conduit Crossing Building Seismic Joints: Provide box on either side of joint and flexible conduit between the box. Provide for a minimum of 3 inches of movement at the seismic joint. Rigid conduit crossings at seismic joints are not acceptable.

PART 4 - MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

- A. Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the price bid for the various items of work in this project.

END OF SECTION