ADMINISTRATIVE SERVICES OFFICE

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
Honolulu, Hawaii

BOARD OF LAND AND NATURAL RESOURCES

Dawn N.S. Chang
Chairperson

CONTRACT SPECIFICATIONS AND PLANS

Job No. J00AO99D
DLNR ASO OFFICE IMPROVEMENTS
KALANIMOKU BUILDING, ROOM 110 / 111
HONOLULU, OAHU, HAWAII

Architect:	Omizu Architecture, Inc.
Electrical Engineer:	Coffman Engineers
Environmental:	EnviroQuest, Inc.

April 2026

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
Honolulu, Hawaii

CONTRACT SPECIFICATIONS AND PLANS

Job No. J00AO99D
DLNR ASO OFFICE IMPROVEMENTS
KALANIMOKU BUILDING, ROOM 110 / 111
HONOLULU, OAHU, HAWAII

Approved: _____

CYNTHIA C. GOMEZ
Fiscal Management Officer
Administrative Services Office

Approved: _____

DINA U. LAU
Acting Chief Engineer
Engineering Division

April 2026

NOTICE TO BIDDERS
(Chapter 103D, HRS)

COMPETITIVE BIDS for Job No. **J00AO99D, DLNR ASO OFFICE IMPROVEMENTS KALANIMOKU BUILDING, ROOM 110 / 111**, Honolulu, Oahu, Hawaii shall be submitted to the Department of Land and Natural Resources, Engineering Division on the specified date and time through the Hawaii State e-Procurement (HIePRO). HIePRO is accessible through the State Procurement Office website at www.spo.hawaii.gov.

The Department of Land and Natural Resources Interim General Condition, dated October 1994, as amended, and the General Conditions –AG008, latest revision shall be made part of the specifications.

The project is located at Kalanimoku Building 1151 Punchbowl Street Room 110 / 111 Honolulu, Oahu, Hawaii.

The work shall generally consist of improvements to Administrative Services Office on the first floor level of the Kalanimoku building. Work shall generally include the removal and disposal of existing furniture and service counter and gate, add / replace carpet tiles where counter is removed and installation of new systems furniture in the entry area of Room 110, work also includes the repainting of existing walls, installation of new systems furniture , and new carpet tile in Room 111 of the Administrative Services Office located on the first floor level of the Kalanimoku building. In addition, minor abatement of hazardous materials, and electrical work to provide power to new systems furniture.

To be eligible to submit a bid, the Bidder must possess a valid State of Hawaii Contractor's license classification "B".

A voluntary pre-bid conference and site visit will be held at the project site, at Room 110 outside front entrance door on Friday, April 24, 2026 at 10:00 a.m.

The estimated cost of construction is $350,000.00.

The award of the contract, if it be awarded, will be subject to the availability of funds.

Since the estimated value of the cost of construction is more than $250,000, the apprenticeship agreement preference pursuant to Hawaii Revised Statutes §103-55.6 (ACT 17, SLH 2009) shall apply.

Should there be any questions, please refer to the HIePRO solicitation.

INFORMATION AND INSTRUCTIONS TO BIDDERS

CONTENTS

INFORMATION AND INSTRUCTIONS TO BIDDERS

A. PROJECT LOCATION AND SCOPE OF WORK: The project location and scope of work shall be as generally described in the Notice to Bidders.

B. PROPOSALS**:** Bidders shall submit their bid, including the completed proposal form, bid bond, and any other documents required by the solicitation as part of their bid through the State of Hawaii e-Procurement System (HIePRO). See Item D, PROPOSAL FORM.

C. GENERAL CONDITIONS: The Department of Land and Natural Resources Interim General Conditions dated October 1994, as amended, shall be made a part of these contract specifications and are referred to hereafter as the General Conditions.

D. PROPOSAL FORM: **The Bidders shall fill out and upload the electronic copy of the proposal form to the HIePRO website when submitting the bid. Bid Proposals shall not be mailed, faxed or delivered to the State, unless requested to do so after the designated closing date. The successful Bidder shall fill out and print a hard copy of the proposal form, sign and submit the form with the contract award package.**

E. OMISSIONS OR ERASURES: Any proposal which contains any omission or erasure or alteration not properly initialed, or conditional bid, or other irregularity may be rejected by the Board of Land and Natural Resources (Board).

F. NOTICE OF INTENT TO BID AND QUESTIONNAIRE:
A Notice of Intent to Bid is not required for this project. In compliance with HRS Section 103D-310, the lowest responsive and responsible bidder may be required to complete a questionnaire. When requested by the State, the completed questionnaire shall be submitted to the Chief Engineer for evaluation. Failure to furnish the requested information within the time allowed may be grounds for a determination of non-responsibility, in accordance with HRS Section 103D-310 and HAR Section 3-122-108.

G. BID SECURITY: A bid security will be furnished by each bidder as provided in sub-section 2.7 of the General Conditions. The successful bidder's bid security will be retained until Contract execution and furnished a performance and payment bond in an amount equal to one hundred percent (100%) of the total Contract price, including an amount estimated to be required for extra work, is furnished.

The Board reserves the right to hold the bid securities of the four lowest bidders until the successful bidder has entered into a contract and has furnished the required performance bond. All bid securities will be returned in accordance with sub-section 3.5 of the General Conditions.

Should the successful bidder fail to enter into a contract and furnish a satisfactory performance bond within the time stated in the proposal, the bid security shall be forfeited as required by law.

H. CONTRACTOR'S LICENSE REQUIRED: The Board will reject all bids received from contractors who have not been licensed by the State Contractors License Board in accordance

with Chapter 444, HRS; Title 16, Chapter 77, Hawaii Administrative Rules; and statutes amendatory thereto.

I. IRREGULAR BIDS: No irregular bids or propositions for doing the work will be considered by the Board.

J. WITHDRAWAL OF BIDS: No bidder may withdraw his bid between the time of the opening thereof and the award of contract.

K. SUCCESSFUL BIDDER TO FILE PERFORMANCE AND PAYMENT BONDS: The successful bidder will be required to file performance and payment bonds each; in the amount equal to the total contract price, including amounts estimated to be required for extra work, as provided in sub-section 3.6 of the General Conditions.

L. NUMBER OF EXECUTED ORIGINAL COUNTERPARTS OF CONTRACT DOCUMENTS: If requested by the Board, six copies of the Contract, performance and payment bonds shall be executed.

M. CHANGE ORDERS: No work of any kind in connection with the work covered by the plans and specifications shall be considered as change order work, or entitle the Contractor to extra compensation, except when the work has been ordered in writing by the Chief Engineer (Engineer) and in accordance with sub-section 4.2 of the General Conditions.

The Contractor shall clearly identify and inform the Engineer in writing of any deviations from the contract documents at the time of submission and shall obtain the Engineer's written approval to the specified deviation prior to proceeding with any work.

N. WAGES AND HOURS: In accordance with sub-sections 7.3 to 7.9 of the General Conditions relative to hours of labor, minimum wages and overtime pay, the current minimum wage rates promulgated by the Department of Labor and Industrial Relations (DLIR) shall be paid to the various classes of laborers and mechanics engaged in the performance of this contract on the job site. The minimum wages shall be increased during the performance of the contract in an amount equal to the increase in the prevailing wages for those kinds of work as periodically determined by the DLIR.

The Department of Land and Natural Resources will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the said minimum wage rates. The possibility of wage increase is one of the elements to be considered by the Contractor in determining his bid, and will not, under any circumstances, be considered as the basis of a claim against the Department under this Contract.

No work shall be done on Saturdays, Sundays, legal State holidays, and/or in excess of eight (8) hours each day without the written consent of the Engineer. Should permission be granted to work at such times, the Contractor shall pay for all inspection administrative costs thereof. No work shall be done at night unless authorized by the Engineer.

O. PERMITS: The State will process permit applications whenever possible, and the Contractor shall procure the pre-processed permits and pay the required fees. If permit applications are not processed by the State, the Contractor shall process the permit applications, permits and

licenses, and pay all charges and fees. In all cases, the Contractor shall give all notices necessary and incident to the due and lawful prosecution of the work.

P. PROPERTY DAMAGE: It shall be the responsibility of the contractor to respect State property and to prevent damage to existing improvements. The Contractor will be responsible for damages resulting from construction operations. Immediately upon discovery, the Contractor shall repair such damage to the satisfaction of the Engineer.

All trees and shrubbery outside the excavation, embankment or construction limits shall be fully protected from injury. All areas damaged by construction activities including the laydown area shall be seeded and regressed upon completion of the project.

Q. TIME: The time of completion is specified in the Proposal. It is the Board's intention to insist the Contractor diligently prosecute the work to completion within the specified time.

Prospective bidders are reminded that the State has the option to proceed with or abandon a project depending on whether the project can be completed for occupancy in the specified time.

It is the bidder's responsibility to check the availability of all materials before bidding. The bidder shall select sub-contractors and suppliers who can warrant availability and delivery of all specified or qualified materials to assure project completion within the specified time.

The successful bidder must assume all risks for completing the project by the specified date. There shall be no extension of time for any reason except for delays caused by acts of God, labor disputes involving unions, or actions of the State. If for any reason the project falls behind schedule, the Contractor shall at its own cost, take necessary remedial measures to get the project back on schedule, i.e., working overtime, air freighting all materials, etc. In addition, if the Contractor fails to fully complete the project by the completion date, Contractor will be required to make the facility usable at its own cost.

R. BIDDER'S RESPONSIBILITY TO PROVIDE PROPER SUPERINTENDENCE: The successful low bidder shall designate in writing to the Engineer the name of its authorized superintendent (Superintendent), who will be present at the job site whenever any work is in progress. The Superintendent shall be responsible for all work, receiving and implementing instructions from the Engineer in a timely manner. The cost for superintendence shall be considered incidental to the project.

If the Superintendent is not present at the site of work, the Engineer shall have the right to suspend the work as described under sub-section 5.5 c. and 7.20 - Suspension of Work of the General Conditions.

S. LIQUIDATED DAMAGES: Liquidated damages in the amount specified in the Proposal will be assessed for each and every calendar day from and after the expiration of the time period stated in the Contract for the completion of the project.

T. HIRING OF HAWAII RESIDENTS: The Contractor shall comply with Act 68, SLH 2010, in the performance and for the duration of this contract. The Contractor shall ensure that Hawaii residents compose not less than eighty percent of the workforce employed to perform

the contract work on the project. The eighty percent requirement shall be determined by dividing the total number of hours worked on the contract by Hawaii residents, by the total number of hours worked on the contract by all employees of the Contractor in the performance of the contract. The hours worked by any Subcontractor of the Contractor shall count towards the calculation for this section. The hours worked by employees with shortage trades, as determined by the Department of Labor and Industrial Relations (DLIR), shall not be included in the calculation for this section.

The requirements shall apply to any subcontract of $50,000 or more in connection with the Contractor, that is, such Subcontractors must also ensure that Hawaii residents compose not less than eighty percent of the Subcontractor's workforce used to perform the subcontract.

U. WATER AND ELECTRICITY: The Contractor shall make all necessary arrangements and pay all expenses for water and electricity used in the construction of this project.

V. PUBLIC CONVENIENCE AND SAFETY: The Contractor shall conduct construction operations with due regard to the convenience and safety of the public at all times. No materials or equipment shall be stored where it will interfere with the safe passage of public traffic. The Contractor shall provide, install, and maintain in satisfactory condition, all necessary signs, flares and other protective facilities and shall take all necessary precautions for the protection of the work and the convenience and safety of the public. The Engineer shall have the right to suspend the performance of the work in accordance with sub-section 7.20 - Suspension of Work of the General Conditions.

W. WORK TO BE DONE WITHOUT DIRECT PAYMENT: Whenever the contract that the Contractor is to perform work or furnish materials of any kind for which no price is fixed in the contract, it shall be understood that the Contractor shall perform such work or furnish said materials without extra charge or allowance or direct payment of any sort. The cost of performing such work or furnishing said material is to be included by the Contractor in a unit price for the appropriate item unless it is expressly specified that such work or material is to be paid for as extra work.

X. AS-BUILT DRAWINGS: As-built drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be required. All authorizations given by the Engineer to deviate from the plans shall be drawn on the job site plans. All deviations from alignments, elevations and dimensions which are stipulated on the plans shall be recorded on the as-built drawings. Final as-built drawings shall be submitted to the Engineer for review and approval. After the Engineer approves the as-built drawings, the contractor shall submit an electronic copy in Adobe PDF format on CD ROM.

Y. ASBESTOS CONTAINING MATERIALS: The use of asbestos containing materials or equipment is prohibited. The Contractor shall insure that all materials and equipment incorporated in the project are asbestos-free

Z WORKER SAFETY: The Contractor shall provide, install and maintain in satisfactory condition all necessary protective facilities and shall take all necessary precautions for the protection and safety of its workers in accordance with the Occupational Safety and Health Standards for the State of Hawaii. The Engineer shall have the right to suspend the

performance of the work in accordance with sub-section 7.20 - Suspension of Work of the General Conditions.

AA. QUANTITIES: All bids will be compared on the basis of quantities of work to be done as shown in the Proposal; the quantities shown in the Unit Price items are estimated, being given as a basis for comparison of bids. The Board reserves the right to increase or decrease the quantities given under the items or delete items entirely as may be required during the progress of the work.

BB. OTHER HEALTH MEASURES: Forms of work site exposure or conditions which may be detrimental to the health or welfare of workers or of the general public shall be eliminated or reduced to safe levels as required by the DOH codes, standards, and regulations. Suitable first aid kits and a person qualified to render first aid, as specified in the DOH regulations, shall be provided at all times when work is scheduled.

CC. HAWAII BUSINESS OR COMPLIANT NON-HAWAII BUSINESS REQUIREMENT: Bidders (Contractors) shall be incorporated or organized under the laws of the State or be registered to do business in the State as a separate branch or division that is capable of fully performing under the contract, as stipulated in §3-122-112 HAR.

DD. COMPLIANCE WITH §3-122-112 HAR:
As a condition for award of the contract and as proof of compliance with the requirements of 103D-310(c) HRS, the apparent low bidder shall furnish the required documents to the Department. If the valid required certificates are not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. Bidder is responsible to apply for and submit the following documents to the Department.

A. TAX CLEARANCE REQUIREMENTS (HRS Chapter 237): Bidder shall obtain a tax clearance certificate from the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS). The certificate is valid for six months from the most recently approved stamp date on the certificate; the certificate must be valid on the date received by the Department.

B. Department of Labor (DLIR) "**Certificate of Compliance**". (HRS Chapter 383 - Unemployment Insurance, Chapter 386 - Workers' Compensation, Chapter 392 - Temporary Disability Insurance, and 393 – Prepaid Health Care): Bidder shall obtain a certificate of compliance from the Hawaii State Department of Labor and Industrial relations (DLIR). The certificate is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

C. Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) "**Certificate of Good Standing**". Bidder shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG). The certificate of good standing is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

Alternately, instead of separately applying for these certificates at the various state agencies, bidder may choose to use the Hawaii Compliance Express (HCE), which allows businesses to

register online through a simple wizard interface at http://vendors.ehawaii.gov to acquire a "Certificate of Vendor Compliance" indicating the bidder's status is compliant with the requirements of §103D-310(c), HRS, and shall be accepted for contracting and final payment purposes. Bidders that elect to use the new HCE services will be required to pay an annual fee of $15.00 to the Hawaii Information Consortium, LLC (HIC). Bidders choosing not to participate in the HCE program will be required to provide the paper certificates as instructed in the previous paragraphs.

P R O P O S A L

FOR

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
State of Hawaii

Job No. J00AO99D
DLNR ASO OFFICE IMPROVEMENTS
KALANIMOKU BUILDING, ROOM 110 / 111
HONOLULU, OAHU, HAWAII

_____, 2026

Chief Engineer
Engineering Division
Department of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Dear Sir:

The undersigned, having carefully examined the local conditions and all available records and information covering conditions which may affect the cost of the work to be performed, and having carefully examined the Plans and Specifications, and other contract documents, hereby proposes to furnish and pay for all materials, tools, equipment, labor and other incidental work necessary to provide selective demolition of existing furniture and furnishings, carpet, wall base and wood gate and wood service counter in the Administrative Services Office Room 110 / 111, on the first floor level of the Kalanimoku building. In addition, minor abatement of hazardous materials will be required during removal work. Installation of new powered modular systems furniture, furnishings, window shades, carpet tile, wall base, repainting interior walls, and electrical work specifically to provide power to the new modular workstations, as required or called for in this Proposal, all according to the true intent and meaning of the Notice to Bidders, Information and Instructions to Bidders, Proposal, Detailed Specifications, Interim General Conditions, Plans, and any and all addenda for:

Job No. J00AO99D
DLNR ASO OFFICE IMPROVEMENTS
KALANIMOKU BUILDING ROOM 110 / 111
HONOLULU, OAHU, HAWAII

on file in the office of the Engineering Division for the TOTAL BASE BID (Items 1 to 8) of:

_____

_____Dollars ($_____)
and will fully complete all work under this contract within 180 consecutive calendar days of which, Twenty one (21) days on-site construction shall be included in the 180 consecutive days, from the date of written notice to proceed, including date of said order, said total sum being itemized on the following pages.

PROPOSAL

Item No.	Quantity	Unit	Description	Unit Price	Total
		BASE BID			
1.		LS	Demolition Work; to include demolition, hauling & disposal as required to construct new improvements. Relocation of salvageable furnitures for temporary storage of items and reinstallation as indicated on plan.		$_____
2.		LS	Carpet. Install carpet and wall base.		$_____
3.		LS	Repainting of all interior walls		$_____
4		LS	Shades		$_____
5.		LS	Systems Furniture. Install systems furniture, partitions and other furnishings.		$_____
6.		LS	Lead Paint Control Measures.		$_____
7.		LS	Electrical Work, in place complete.		$_____
				Subtotal Base Bid (Items 1-7)	$_____
8.		LS	Mobilization and Demobilization (not to exceed 10% of the Subtotal Base Bid)		$_____
				Total Base Bid (Items 1-8)	$_____

RECYCLED PRODUCTS PREFERENCE

This project allows a 10% price preference for recycled products in accordance with HRS 103D-1005. Please indicate your selection of recycled or non-recycled product by indicating its cost FOB jobsite unloaded in the schedule below, including applicable General Excise & Use Taxes.

DESCRIPTION	RECYCLED PRODUCT COST	NONRECYCLED PRODUCT COST
_____	$_____	$_____
_____	$_____	$_____
_____	$_____	$_____
_____	$_____	$_____

The bidder requesting a recycled product preference shall also complete and submit the form "CERTIFICATION OF RECYCLED CONTENT" as shown in the Interim General Conditions and provide all supporting information with this proposal. Additional information may be requested to qualify a product.

The following definitions are applicable to the CERTIFICATION OF RECYCLED CONTENT form:

"Post-consumer recovered material" means any product used by a consumer, including a business that purchases the material, that has served its intended end use, and that has been separated or diverted from the solid waste stream for the purpose of use, reuse, or recycling.

"Product" includes materials, manufactures, supplies, merchandise, goods, wares, and foodstuffs.

"Recovered material" means waste material and by-products that have been separated, diverted, or removed from the solid waste stream after a manufacturing process for the purpose of use, reuse, or recycling. Recovered material does not include those materials and by-products that are generated and normally reused on-site or within original manufacturing processes (such as mill broke, in the case of paper products).

"Recycled content" means the percentage of a product composed of recovered material, or post-consumer recovered material, or both.

"Recycled product" means a product containing recovered material, or post-consumer recovered material, or both.

The bidder agrees that preference for recycled products shall be taken into consideration to determine the low bidder in accordance with said Section and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive any preference.

APPRENTICESHIP AGREEMENT PREFERENCE

1. If applicable to this project, any bidder seeking the preference must be a party to an apprenticeship agreement registered with the State Department of Labor and Industrial Relations (DLIR) at the time the bid is submitted for each apprenticeable trade the bidder will employ to construct the project. "Employ" means the employment of a person in an employer-employee relationship.

    a. The apprenticeship agreement shall be registered with the DLIR and conform to the requirements of Hawaii Revised Statutes Chapter 372.

    b. Subcontractors do not have to be a party to an apprenticeship agreement for the bidder to obtain preference.

    c. The bidder is not required to have apprentices in its employ at the time the bid is submitted to qualify for the preference.

2. A bidder seeking the preference must state the apprenticeable trade the bidder will employ for each trade to be employed to perform the work by submitting a completed signed original *Certification Form 1* verifying participation in an apprenticeship program registered with DLIR. "Apprenticeable trade" shall have the same meaning as "apprenticeable occupation" pursuant to Hawaii Administrative Rules (HAR) §12-30-5.

    a. The *Certification Form 1* shall be authorized by an apprenticeship sponsor listed on the DLIR list of registered apprenticeship programs. "Sponsor" means an operator of an apprenticeship program and in whose name the program is approved and registered with the DLIR pursuant to HAR §12-30-1.

    b. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor.

    c. The completed signed original *Certification Form 1* for each trade must be submitted with the bid. Previous certifications shall not apply.

    d. When filling out the *Certification Form 1*, the name of Apprenticeable Trade and Apprenticeship Sponsor must be the same as recorded in the List of Construction Trades in Registered Apprenticeship Programs that is posted on the DLIR website. "Registered apprenticeship program" means a construction trade program approved by the DLIR pursuant to HAR §12-301 and §12-30-4.

    e. The *Certificate Form 1* and the List of Construction Trades in Registered Apprenticeship Programs is available on the DLIR website at: http://hawaii.gov/labor/wdd.

3. Upon receiving the *Certification Form 1*, the Procurement Officer will verify that the apprenticeship program is on the List of Construction Trades in Registered Apprenticeship Programs and that the form is signed by an authorized official of the Apprenticeship Program Sponsor. If the programs and signature are not confirmed by the DLIR, the bidder will not qualify for the preference.

4. If the bidder is certified to participate in an apprenticeship program for each trade which will be employed by the bidder for the project, a preference will be applied to decrease the bidder's bid amount by five percent (5%) for evaluation purposes.

5. Should the bidder qualify for other preferences all applicable preferences shall be applied to the bid price.

CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS PROHIBITED

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.

CONDITION OF AWARD

It is understood that the award of the contract will be made on the basis of the lowest responsible Total Base Bid (Items 1 to 8) selected by the Board of Land and Natural Resources. Write the total of bid items 1 to 8 on page P-1.

It is understood and agreed that the Board of Land and Natural Resources reserves the right to reject any and/or all bids and waive any defects when, in the Board's opinion, such rejection or waiver will be for the best interest of the State of Hawaii.

In the event all bids exceed available funds certified by the appropriate fiscal officer, the head of the purchasing agency responsible for the procurement in question is authorized in situations where time or economic considerations preclude resolicitation of work of a reduced scope to negotiate an adjustment of the bid price, including changes in the bid requirements, with the low responsible and responsive bidder, in order to bring the bid within the amount of available funds. It is understood and agreed upon that the head of the purchasing agency may delete a portion or all of any item(s) in the proposal at the stated unit or lump sum price as necessary to stay within the available funding. The bidder is responsible to make an earnest effort to represent the actual cost of each item, including all materials, labor, equipment, overhead and profit in their bid proposal to preclude claims of anticipated profit or loss of profit because of an unbalanced bid proposal.

It is also understood that if a mutually agreeable cost for the reduced scope of work necessitated by a lack of available funds cannot be agreed upon between the bidder and the head of the purchasing agency within 14 calendar days after the bid opening, then the bid may be rejected in the best interest of the purchasing agency, and the head of the purchasing agency may negotiate in progressive order (lowest to highest) with the next lowest responsible and responsive bidder.

It is also understood and agreed that the award of the contract shall be conditioned upon funds being made available for this project and further upon the right of the Board of Land and Natural Resources to hold all bids received for a period of one hundred eighty (180) days from the date of the opening thereof, unless otherwise required by law, during which time no bid may be withdrawn.

It is also understood that Notice to Proceed may be delayed up to one (1) year after the bid opening date, and that no additional compensation will be provided for any claim for escalation or delay for issuance of Notice to Proceed on or before that date.

It is also understood and agreed that the quantities given herewith are approximate only and are subject to increase or decrease, and that the undersigned will perform all quantities of work as either increased or decreased, in accordance with the provisions of the Contract Specifications.

It is also understood and agreed that the estimated quantities shown for the items for which a UNIT PRICE is asked in this Proposal are only for the purpose of comparing on a uniform basis, bids offered for the work under this contract, and the undersigned agrees that he is satisfied with and will at no time, dispute said estimated quantities as a means of claims for anticipated profit or loss of profit, because of a difference between the quantities of the various classes of work done or the materials and equipment installed, and the said estimated quantities. On UNIT PRICE bids, payment will be made only for the actual number of units incorporated into the finished project at the contract UNIT PRICE.

After the HIePRO bid due date and time, the figures will be extended and/or totaled in accordance with the bid prices of the acceptable proposals and the totals will be compared. In the comparison of bids, words written in the proposal shall govern over figures and unit prices will govern over totals. Until the award of the contract, however, the right will be reserved to reject any and all proposals and to

waive any defects or technicalities as may be deemed best for the interest of the State.

It is also understood and agreed that liquidated damages in the amount of ONE HUNDRED FIFTY AND NO/100 DOLLARS ($150.00) for each and every calendar day in excess thereof prior to completion of the contract shall be withheld from payments due to the Contractor.

It is also understood and agreed that if this bid is accepted, the successful bidder must enter into and execute a contract with the Board of Land and Natural Resources and furnish a Performance and Payment Bond, as required by law. These bonds shall conform to provisions of Section 103D-324 and 325, Hawaii Revised Statutes and any law applicable hereto.

It is also understood and agreed that the successful bidder will provide all necessary labor, materials, tools, equipment, and other incidentals necessary to do all the work and furnish all the materials specified in the contract in the manner and time herein prescribed, and according to the requirements of the Engineer as therein set forth.

It is understood that by submitting this proposal, the undersigned is declaring that his firm has not been assisted or represented on this matter by an individual who has, in a State capacity, been involved in the subject matter of this contract in the past two years.

It is understood that by submitting this proposal in accordance with HAR 3-122-192, the undersigned is declaring that the price submitted is independently arrived without collusion.

It is also understood that by submitting this proposal, a Certification for Safety and Health Programs for bids in excess of $100,000 (in accordance with HRS 396-18), the undersigned certifies that his organization will have a written safety and health plan for this project that will be available and implemented by the Notice to Proceed date of this project. Details of the requirements of this plan may be obtained from the Department of Labor and Industrial Relations, Occupational, Safety and Health Division (HIOSH).

It is further understood and agreed that the successful bidder shall comply with paragraph 3.1.a "SUBCONTRACTING" of the General Provisions which requires that the contractor shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than twenty percent (20%) of the value of all work embraced in the Contract, except that certain contract items of work, if specifically referred to in the special provisions, will be exempted from said twenty percent requirement.

Compliance with §103-310 HRS. As a condition of award all bidders shall comply with all laws governing entities doing business in the State, including Chapter 237 HRS (general excise tax); Chapter 383 HRS (employment security – unemployment insurance); Chapter 386 HRS (workers compensation); Chapter 392 HRS (temporary disability insurance); and Chapter 393 HRS (pre-paid health care), and shall produce all documents to the State (DLNR, Engineering Division) required to demonstrate compliance with these subsections. Any bidder making a false affirmation or certification under this subsection shall be suspended and may be debarred from further offerings or awards pursuant to §103D-702 HRS.

RECEIPT OF ADDENDA

The bidder also acknowledges receipt of any and all addenda issued by the Engineering Division, by recording the date of receipt of the respective addenda in the space provided below:

Addendum	Date Received	Addendum	Date Received
No. 1	_____	No. 5	_____
No. 2	_____	No. 6	_____
No. 3	_____	No. 7	_____
No. 4	_____	No. 8	_____

It is understood that failure to receive any such addendum shall not relieve the Contractor from any obligation under this Proposal as submitted.

It is also understood and agreed that if this Proposal is accepted and the undersigned should fail or neglect to contract as aforesaid, the Board may determine that the bidder has abandoned the Contract, and thereupon, forfeiture of the security accompanying his proposal shall operate and the same shall become the property of the Board.

JOINT CONTRACTORS OR SUBCONTRACTORS TO BE ENGAGED ON THIS PROJECT

The Bidder agrees that the following is a complete listing of all joint contractors or subcontractors covered under Chapter 444, Hawaii Revised Statutes (HRS), who will be engaged by the Bidder on this project to perform the required work indicated pursuant to Section 103D-302, HRS. 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. The Bidder certifies that the completed listing of joint contractors or subcontractors fulfills the requirements for the project and the Bidder, together with the listed subcontractors or joint contractors have all the specialty contractor's licenses to complete the work, except as provided for in HRS §103D-302(b). Failure of the Bidder to comply with this requirement may be just cause for rejection of the bid.

"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 in which 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.

General Engineering "A" Contractors automatically have these "C" specialty contractor's licenses: C-3, C-9, C-10, C-17, C-24, C-31a, C-32, C-35, C-37a, C-37b, C-38, C-43, C-49, C-56, C-57a, C-57b and C-61.

General Building "B" Contractors automatically have these "C" specialty contractor's licenses: C-5, C-6, C-10, C-12, C-24, C-25, C-31a, C-32a, C-42a and C-42b.

In completing the Joint Contractors or Subcontractors List, describe the specialty contractor's nature and scope of work to be performed for this project and provide the complete firm name of the joint contractor or subcontractor in the respective columns. If the Bidder is a general contractor and providing the work of the required specialty contractor, whose license is not automatically held pursuant to HAR 16-77-32, fill in the Bidder's (general contractor's) name and nature and scope of work to be performed on this project.

List only one joint contractor or subcontractor per required specialty contractor's classification, unless within the same specialty, the work of each joint contractor or subcontractor can be described so that there is no overlap in work descriptions.

If a contractor's license is required by law for the performance of the work which is called for in this bid, the bidder and all subcontractors must have the required license before the submission of the bidder's proposal in the case of a non-federal aid project, and for federal-aid projects, the bidder must have the required license prior to the award of the project and all subcontractors prior to the start of the subcontracted work.

COMPLETE FIRM NAME OF JOINT CONTRACTOR OR SUBCONTRACTOR	NATURE AND SCOPE OF WORK TO BE PERFORMED

Enclosed herewith is a:

1.	Surety Bond (*1)	)	
2.	Legal Tender (*2)	)	
3.	Cashier's Check (*3)	)	
4.	Certificate of Deposit (*3)	)	in the
5.	Certified Check (*3)	)	amount
6.	Official Check (*3)	)	of
7.	Share Certificate (*3)	)	
8.	Teller's Check (*3)	)	
9.	Treasurer's Check (*3)	)	

(Cross Out Those Not Applicable)

_____

_____Dollars ($_____)

as required by law.

Exact Legal Name of Company, Joint Venture or Partnership

Company is:
☐ Sole Proprietor ☐ Partnership ☐ Corporation ☐ Joint Venture ☐ Other _____

Contractor's License No.: _____

Federal I.D. No.: _____

Hawaii General Excise Tax License I.D. No.: _____

Payment address (other than street address below): _____

City, State, Zip Code: _____

Business Address (street address): _____

City, State, Zip Code: _____

Respectfully submitted,

By _____
Authorized (Original) Signature (*4)

Title: _____

Print Name: _____

Date: _____

Telephone No.: _____

E-Mail Address: _____

NOTES:

1. Surety bond underwritten by a company licensed to issue bonds in this State;

2. Legal tender; or

3. A certificate of deposit; share certificate; or cashier's, treasurer's, teller's, or official check drawn by, or a certified check accepted by, and payable on demand to the State by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration.

   A. These instruments may be utilized only to a maximum of $100,000.

   B. If the required security or bond amount totals over $100,000, more than one instrument not exceeding $100,000 each and issued by different financial institutions shall be accepted.

4. Please attach to this page evidence of the authority of this officer to submit bids on behalf of the Company and also the names and residence addresses of all officers of the Company.

5. Fill in all blank spaces with information asked for or bid may be invalidated. PROPOSAL MUST BE INTACT, MISSING PAGES MAY INVALIDATE YOUR BID.

End of Proposal

SPECIAL PROVISIONS

Amend INTERIM GENERAL CONDITIONS, dated October 1994, as follows:

Section 1 – Definitions

AMEND the definition of "Bidder" with the following:

Bidder or Offeror: Any individual, partnership, firm, corporation, joint venture, design-build entity, or other legal entity submitting, directly or through a duly authorized representative or agent, a proposal for the work contemplated.

Section 2 – Proposal Requirements and Conditions

1. **AMEND** Section 2.1 Qualification of Bidder with the following:

Written Notice of Intent to Bid or Offer: A written Notice of Intent to Bid is not required for the Solicitation.

Standard Qualification Questionnaire: Bidders may be required to complete a standard qualifications questionnaire. When requested, the information shall be furnished within two working days or longer at the discretion of the Engineer. Failure to furnish the requested information within the time allowed may be grounds for a determination of non-responsibility, in accordance with HRS Section 103D-310 and HAR Section 3-122-108.

Hawaii Business or Compliant Non-Hawaii Business Requirement: Bidders shall be incorporated or organized under the laws of the State or be registered to do business in the State as a separate branch or division that is capable of fully performing under the contract, as stipulated in §3-122-112 HAR. A certified letter is not required prior to bid opening.

Compliance with §3-122-112 HAR: As a condition for award of the contract and as proof of compliance with the requirements of 103D-310(c) HRS, the apparent low bidder shall furnish the required documents to the Department. If the valid required certificates are not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. Bidder is responsible to apply for and submit the following documents to the Department.

A. Tax Clearance (HRS Chapter 237): Bidder shall obtain a tax clearance certificate from the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS). The certificate is valid for six months from the most recently approved stamp date on the certificate; the certificate must be valid on the date received by the Department.

B. Department of Labor (DLIR) "Certificate of Compliance". (HRS Chapter 383 - Unemployment Insurance, Chapter 386 - Workers' Compensation, Chapter 392 - Temporary Disability Insurance, and 393 – Prepaid Health Care): Bidder shall obtain a certificate of compliance from the Hawaii State Department of Labor and Industrial relations (DLIR). The certificate is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

C. Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) "Certificate of Good Standing". Bidder shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG). The certificate of good standing is valid for six months from the date of issue;

certificates must be valid on the date received by the Department.

Hawaii Compliance Express. Alternately, instead of separately applying for these certificates at the various state agencies, bidder may choose to use the Hawaii Compliance Express (HCE), which allows businesses to register online through a simple wizard interface at http://vendors.ehawaii.gov to acquire a "Certificate of Vendor compliance" indicating that bidder's status is compliant with requirements of §103D-310(c), HRS, shall be accepted for contracting and final payment purposes.
Bidders that elect to use the new HCE services will be required to pay an annual fee of $15.00 to the Hawaii Information Consortium, LLC (HIC). Bidders choosing not to participate in the HCE program will be required to provide the paper certificates as instructed in the previous paragraphs.

2. **ADD** Section 2.4a, Pre-Bid Conferences

Required Pre-bid Conferences: For construction and design-build projects with an estimated value of $500,000 or more and solicited under the competitive sealed bid method (103D-302 HRS); and for construction and design-build projects with an estimated value of $100,000 or more and solicited under the competitive sealed proposal method (103D-303 HRS); a pre-bid conference is required.

Other Pre-Bid Conferences: The Department may require a pre-bid conference for construction or design-build projects that are below the dollar threshold listed in above or when projects have special or unusual requirements.

Other Conditions: The Department may require the prospective Bidders to make a physical inspection of the project site and make attendance at the pre-bid conference a condition for submitting an offer.

Nothing stated at the pre-bid conference shall change the solicitation unless a change is made by written addendum.

3. **DELETE** Section 2.5, Addenda and Interpretations, in its entirety and replace with the following:

"Discrepancies, omissions, or doubts as to the meaning of drawings and specifications should be communicated using the question and answer section on the HIePRO solicitation for interpretation and must be received in the time frame set in the HIePRO solicitation. Any interpretation, if made and any supplemental instructions will be in the form of written addenda to the plans and specifications and made available prior to the offer due date. It shall be the prospective bidder's sole responsibility to verify and obtain any said addenda. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents."

Section 3 – Award and Execution of Contract

1. **AMEND** Section 3.3, Award of Contract, by deleting "sixty (60)" and replacing with "one hundred eighty (180)" in the first paragraph.

2. **AMEND** Section 3.3, Award of Contract, by adding the following after the first paragraph:

"If the contract is not awarded within the one hundred eighty (180) days, the Department may request the successful Bidder to extend the time for the acceptance of its bid. The Bidder may reject such a request without penalty; and in such case, the Department may at its sole discretion make a similar offer to the next lowest responsive and responsible bidder and so on until a bid is duly accepted or until the

Department elects to stop making such requests."

3. **AMEND** Section 3.9, Notice to Proceed, by replacing the last paragraph with the following:

In the event the Notice to Proceed is not issued within three hundred and sixty-five (365) calendar days after the date of bid opening, the Contractor may submit a claim for increased labor and materials costs (but not overhead costs). The claim shall be for labor and material costs incurred after 365 days and the full duration of the contract time allowed for the performance of the work (as specified on Page 1 of the Request for Proposals) have elapsed. Such claims shall be accompanied with the necessary documentation to justify the claim. No payments will be made for escalation costs that are not fully justified as determined by the State.

4. **ADD** Section 3.10, Protests:

"**3.10 PROTESTS**—Pursuant to Section 103D-701, Hawaii Revised Statutes, an actual or prospective offeror who is aggrieved in connection with the solicitation or award may submit a protest. Any protest shall be submitting in writing to the Chairperson, Department of Land and Natural Resources, 1151 Punchbowl Street, Honolulu, Hawaii 96813, or designee as specified in the solicitation.

A protest shall be submitted in writing within five (5) working days after the aggrieved person knows or should have known the facts giving rise thereto; provided that a protest based upon the content of the solicitation shall be submitted in writing prior to the date set for receipt of offers. Further provided that a protest of an award or proposed award shall be submitted within five (5) working days after the posting of the award of the contract.

The notice of award, if any, resulting from this solicitation shall be posted on the HIePRO website.

Section 5 – Control of Work

AMEND Section 5.8 Value Engineering Incentive by deleting "$100,000" and replacing with "$250,000" in the first paragraph.

Section 6 – Substitution of Materials and Equipment

ADD the following to Section 6.3 Sub-paragraph b:

4. If the substitution meets all the requirements of the specifications and plans.

Section 7 – Prosecution and Progress

1. **DELETE** Section 7.2d in its entirety and replace with the following:

"d. Proof of Insurance Coverage

A Certificate of Insurance or other documentary evidence, to the satisfaction of the Engineer, that the Contractor has in place all insurance coverage required by the contract. The Certificate of Insurance shall contain wording which identifies the Project number and Project title for which the certificate of insurance is issued. Refer to the following for insurance requirements:

1. Insurance Requirements

(a) Obligation of Contractor - Contractor shall not commence any work until it obtains, at its own expense, all required herein insurance. Such insurance must have the approval of the Department as to limit, form and amount and must be maintained with a company authorized by laws of the State to issue such insurance in the State of Hawaii. Coverage by a "Non-Admitted" carrier is permissible provided the carrier has a AM Best's Rating of "A-VII" or better.

(b) All insurance described herein will be maintained by the Contractor for the full period of the contract and in no event will be terminated or otherwise allowed to lapse prior to written certification of final acceptance of the work by the Department.

(c) Certificate(s) of Insurance acceptable to the Department shall be filed with the Engineer prior to commencement of the work. Certificates shall identify if the insurance company is a "captive" insurance company or a "Non-Admitted" carrier to the State of Hawaii. The Best's Rating must be stated for the "Non-Admitted" carrier. Certificates shall contain a provision that coverages afforded under the policies will not be canceled or changed until at least thirty (30) days written notice has been given to the Engineer by registered mail. The insurance policies shall name the State of Hawaii, its officers and employees as an additional insured and such coverage shall be noted on the certificate. Should any policy be canceled before final acceptance of the work by the Department, and the Contractor fails to immediately procure replacement insurance as specified, the Department, in addition to all other remedies it may have for such breach, reserves the right to procure such insurance and deduct the cost thereof from any money due to the Contractor.

(d) Nothing contained in these insurance requirements is to be construed as limiting the extent of Contractor's responsibility for payment of damages resulting from its operations under this contract, including the Contractor's obligation to pay liquidated damages, nor shall it affect the Contractor's separate and independent duty to defend, indemnify and hold the Department harmless pursuant to other provisions of this contract. In no instance will the Department's exercise of an option to occupy and use completed portions of the work relieve the Contractor of its obligation to maintain the required insurance until the date of final acceptance of the work.

(e) All insurance described herein shall be primary and cover the insured for all work to be performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including traffic detour work or other work performed outside the work area, and all change order work.

(f) The Contractor shall, from time to time, furnish the Engineer, when requested, satisfactory proof of coverage of each type of insurance required or a copy of the actual policies covering the work. Failure to comply with the Engineer's request may result in suspension of the work, and shall be sufficient grounds to withhold future payments due the Contractor and to terminate the contract for Contractor's default.

(g) If the Contractor is self-insured, it shall furnish, upon the request and the satisfaction of the Engineer, any documentation to demonstrate the ability to self-insure itself. The Engineer, from time to time, can conduct an audit to determine the ability of the Contractor to be self-insured. Failure to comply with the Engineer's request will be considered a material breach of the contract, and at the discretion of the Engineer, may be sufficient grounds to terminate

the contract, suspend any work or withhold future payments.

(h) It is the responsibility of the Contractor to notify the Department of any changes to its insurance policies or if the Contractor receives a notice of cancellation of any of its insurance policies. The Contractor will immediately provide written notice to the Department should the insurance policies evidenced on its Certificate of Insurance form be cancelled, limited in scope, or not renewed upon expiration.

2. Types of Insurance - The Contractor shall purchase and maintain insurance described below which shall provide coverage against claims arising out of the Contractor's operations under the contract, whether such operations be by the Contractor itself or by the subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

(a) Worker's Compensation. The Contractor and all subcontractors shall obtain worker's compensation insurance for all persons whom they employ or may employ in carrying out the work under this contact. This insurance shall be in strict conformity with the requirements of the most current and applicable State of Hawaii Worker's Compensation Insurance laws in effect on the date of the execution of this contract and as modified during the duration of the contract.

(b) Commercial General Liability. The Contractor shall obtain General Liability insurance with a limit of not less than $1,000,000 per occurrence and $2,000,000 aggregate. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess polices."

(c) Comprehensive Automobile Liability. The Contractor shall obtain Auto Liability insurance covering all owned, non-owned and hired autos with a combined single Limit of not less than $1,000,000 per accident for bodily injury and property damage. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess polices.

Furthermore, the Contractor's commercial general liability insurance and automobile liability insurance shall include coverage for bodily injury, sickness, disease or death of any person, arising directly or indirectly out of, or in connection with, the performance of work under this contract.

The Contractor's property damage liability insurance shall provide for all damages arising out of injury to or destruction of property of others including the Department's, arising directly or indirectly out of or in connection with the performance of the work under this contract including explosion or collapse.

The Contractor shall either:

i. Require each of its subcontractors to procure and to maintain during the life of its subcontract, subcontractors' comprehensive general liability, automobile liability and property damage liability insurance of the type and in the same amounts specified herein; or

ii. Insure the activities of its subcontractors in its own policy.

The Contractor will be permitted, in cooperation with insurers, to maintain a self-insured retention for up to 25% of the per occurrence combined single limits of the commercial general liability and the automobile liability policies. The existence of the self-insured retention must be noted on the certificate of insurance coverage submitted to the Department or else it will be understood that the insurer is providing first dollar coverage for all claims. For all claims within the self-insured retention amount, the rights, duties and obligations between the Contractor and the Department shall be identical to that between a liability insurer and the Department, as an additional insured, as if there was no self-insured retention.

(d) Builder's Risk Insurance. Unless included in the Specifications of this project, the Contractor shall not be required to provide builder's risk insurance. If required as noted in the Specifications, builder's risk insurance shall be provided during the progress of work and until final acceptance by the Department upon completion of the contract. It shall be "All Risk" (including but not limited to earthquake, windstorm and flood damage) completed value insurance coverage on all completed work and work in progress to the full replacement value thereof. Such insurance shall include the Department as additional name insured. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess polices.

The Contractor shall submit to the Engineer for its approval all items deemed to be uninsurable. The policy may provide for a deductible in an amount of up to 25% of the amount insured by the policy. With respect to all losses up to any deductible amount, the relationship between the Contractor and the Department shall be that of insurer and additional insured as if no deductible existed".

2. **DELETE** Section 7.16 in its entirety and replace with the following:

"RESPONSIBILITY FOR DAMAGE CLAIMS; INDEMNITY – The Contractor shall indemnify the State and the Department against all loss of or damage to the State's or the Department's existing property and facilities arising out of any act or omission committed in the performance of the work by the Contractor, any subcontractor or their employees and agents. Contractor shall defend, hold harmless and indemnify the Department and the State, their employees, officers and agents against all losses, claims, suits, liability and expense, including but not limited to attorneys' fees, arising out of injury to or death of persons (including employees of the State and the Department, the Contractor or any subcontractor) or damage to property resulting from or in connection with performance of the work and not caused solely by the negligence of the State or the Department, their agents, officers and employees. The State or the

Department may participate in the defense of any claim or suit without relieving the Contractor of any obligation hereunder. The purchase of liability insurance shall not relieve the Contractor of the obligations described herein.

The Contractor agrees that it will not attempt to hold the State and its Departments and Agencies and their officers, representatives, employees or agents, liable or responsible for any losses or damages to third parties from the action of the elements, the nature of the work to be done under these specifications or from any unforeseen obstructions, acts of God, vandalism, fires or encumbrances which may be encountered in the prosecution of the work.

The Contractor shall pay all just claims for materials, supplies, tools, labor and other just claims against the Contractor or any subcontractor in connection with this contract and the surety bond will not be released by final acceptance and payment by the Department unless all such claims are paid or released. The Department may, but is not obligated to, withhold or retain as much of the monies due or to become due the Contractor under this contract considered necessary by the Engineer to cover such just claims until satisfactory proof of payment or the establishment of a payment plan is presented.

The Contractor shall defend, indemnify and hold harmless the State and its Departments and Agencies and their officers, representatives, employees or agents from all suits, actions or claims of any character brought on account of any claims or amounts arising or recovered under the Worker's Compensation Laws or any other law, by-law, ordinance, order or decree.

Section 8 – Measurement and Payment

1. **DELETE** Section 8.7a in its entirety and replace with the following:

a. Tax Clearances from the State of Hawaii Department of Taxation and Internal Revenue Service, subject to section 103D-328, HRS, current within two months of issuance date indicating that all delinquent taxes levied or accrued under State Statutes against the contractor have been paid.

2. **ADD** Section 8.7d, Certificate of Compliance:

d. A Certification from the Contractor affirming that the Contractor has, as applicable, remained in compliance with all laws as required by Section 103D-310, HRS, and Section 3-122-112, HAR. A contractor making a false affirmation shall be suspended and may be debarred pursuant to section 103D-702, HRS.

    1. Certification of Compliance for Final Payment, State Procurement Office Form-22. Must be Signed Original.

3. **ADD** Section 8.7e, Hawaii Compliance Express:

e. In lieu of submitting the tax clearances from Taxation and IRS, and SPO Form -22, the Contractor may choose to use the Hawaii Compliance Express as described on page SP-1 of this Special Provisions.

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DIVISION 13 – SPECIAL CONSTRUCTION

DIVISION 14 – CONVEYING SYSTEMS

NOT INCLUDED

DIVISION 15 – MECHANICAL

NOTE INCLUDED

DIVISION 16 – ELECTRICAL

DIVISION 1 – GENERAL REQUIREMENTS

SECTION 01019

GENERAL SPECIFICATIONS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Work shall consist of furnishing all labor, tools, materials and equipment necessary and required to construct in place complete all work as indicated on the drawings and as specified herein.

1.2 GENERAL

A. Examination of Premises: The Contractor shall contact the Engineer and obtain permission before visiting the site.

B. All lines and grades shall be established by a licensed surveyor, or licensed Civil Engineer, registered in the State of Hawaii. The Contractor shall submit evidence of current and valid registration.

C. Notices: The Contractor shall notify the Engineer and give at least three (3) working days notice before starting any work.

D. Disruption of Utility Services: All work related to the temporary disconnection of electrical system shall be pre-arranged with the Engineer so that any disruption of such services will be kept to a minimum. In the event temporary power hook-up is required, the Contractor shall provide the necessary services.

E. Contractor's Operations

1. The Contractor must employ, insofar as possible, such methods and means of carrying out the work so as not to cause any interruption or interference to the facility's operations. Where the Contractor's operations would result in interruptions which would hamper the operations of the facilities, the Contractor shall rearrange the schedule of work accordingly.

2. The Contractor shall maintain safe passageway to and from the facility for the user agency personnel and the public at all times.

F. Lead Paint

1. When the project includes paint to be disturbed that was applied prior to 1980, it shall be assumed to contain lead. The Contractor shall inform its employees, subcontractors, and all other persons engaged in the project that lead containing paints are present in the

existing buildings at the job site and to follow the requirements of the Department of Labor and Industrial Relations, Division of Occupational Safety and Health, Title 12, Subtitle 8,Chapter 148, Lead Exposure in Construction, Hawaii Administrative Rules (Chapter 12-148, HAR).

G. Parking Policy for Contractor

1. The DLNR is a tenant in the Kalanimoku building that is owned and operated by DAGS. Therefore, DLNR cannot provide parking. The Contractor shall be responsible for the parking coordination and costs. Below are some parking options:

a. Obtain a parking permit from DAGS by contacting (Fees will apply):
Richard F. Hung
Operations Supervisor, DAGS AMD
Work: (808) 586-035
Mobile: (808) 282-6694
Email: richard.f.hung@hawaii.gov.

b. Pay the public parking meter in the Kalanimoku parking lot which is on a first-come basis. The cost to park is $2.00 for 1 hour, $4.00 for 2 hours, $8.00 for 3 hours, and $12.00 for 4 hours. Parking is open Monday to Friday, 5:45 AM to 5:00 PM. Enforcement begins at 7 AM until 5 PM.

c. The Contractor may make their own parking arrangements, if parking is deemed necessary.

d. If a dumpster is needed for disposal, the Contractor shall coordinate with DAGS on dumpster location and fees. The Contractor shall be responsible for placing a plywood board prior to dumpster placement to protect the pavement.

H. Toilet Accommodations: The Contractor may use the existing toilet facilities if so designated by the Engineer; however, it is the Contractor's responsibility to keep same clean and in a sanitary condition at all times.

I. Protection of Property: The Contractor shall continually maintain adequate protection of all its work from damage and shall protect all property, including but not limited to buildings, equipment, furniture, grounds, vegetation, material, utility systems located at and adjoining the job site. The Contractor shall repair, replace or pay the expense of repair of damages resulting from its operations.

J. Use of Power Driven Equipment: The Contractor is cautioned to take all necessary safety precautions to protect the facility personnel, and the public whenever power driven equipment is used.

K. Safety: The Contractor shall carefully read and strictly comply with the requirements of the Hawaii Occupational Safety and Health Law, Chapter 396, Hawaii Revised Statutes,

as amended, is applicable and made a part of the Contract.

L. Clean Up Premises: The Contractor shall clean up and remove from premises all debris accumulated from operations as necessary or as directed. See also Section 7.25 of the General Conditions.

M. Responsibility

1. The State will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the prime Contractor in matters pertaining to other trades employed on the job. The Contractor shall be responsible for coordinating the work of all trades on the job.

2. Should the Contractor discover any discrepancy in the plans or specifications, the Contractor shall immediately notify the Engineer before proceeding any further with the work, otherwise, the Contractor will be held responsible for any cost involved in correction of work placed due to such discrepancy.

N. Cooperation With Other Contractors: The State reserves the right at any time to contract for or otherwise perform other or additional work within the contract zone limits of this Contract. The Contractor of this project shall, to the extent ordered by the State, conduct its work so as not to interfere with or hinder the progress or completion of the work performed by other contractors.

O. Division of the Work: The Divisions and Sections into which these Specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to all work specified within each Section.

P. Drawings and Specifications

1. The Contractor shall not make alterations in the drawings and specifications. In the event the contractor discovers any errors or discrepancies, the Contractor shall immediately notify the Engineer in accordance with the General Conditions.

2. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the work.

3. Specifications and drawings are prepared in abbreviated form and include incomplete sentences. Omission of words or phrases such as "the Contractor shall", "as shown on the drawings", "a", "an", and "the" are intentional. Omitted words and phrases shall be provided by inference to form complete sentences.

Q. Required Submittals

1. Required submittals as specified in the Technical Sections of these specifications include one or more of the following: Shop drawings; color samples; material

samples; technical data; schedules of materials; schedules of operations; guarantees; operating and maintenance manuals; and as-built drawings.

2. The Contractor shall make a comprehensive list of the required submittals, by Specification Section, and submit this list to the Engineer within 15 days after notice to proceed.

3. As-Built Drawings: When as-built drawings are required for submittal, the following shall apply:

   a. As-built drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be required.

   b. All deviations from alignments, elevations and dimensions which are stipulated on the plans shall be recorded in red on the as-built drawings.

   c. The following procedure shall be followed:

      1) Immediately after these changes are constructed in place, the Contractor shall record them on the field office plans.

      2) Within two weeks after final inspection of the project, the Contractor shall transfer the changes marked on the field office plans onto a clean copy of plans using a red pencil. Any deletions shall be so noted and redrawn as necessary. The Contractor shall stamp or mark the tracings "AS-BUILT", and also sign and date each drawing so marked.

      3) The Contractor shall submit the as-built drawings to the Engineer for review and approval. After the Engineer approves the as-built drawings, the Contractor shall submit an electronic copy in Adobe PDF format on CD ROM.

      4) Any as-built drawing which the Engineer determines does not accurately record the deviation shall be corrected by the State, and the Contractor shall be charged for the services.

END OF SECTION

SECTION 01090

STANDARD REFERENCES

PART 1 - GENERAL

Wherever used in the project, the following abbreviations will have the meanings listed:

Abbreviation	Company
AA	Aluminum Association Incorporated 818 Connecticut Avenue, N.W. Washington, D.C. 20006
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W., Suite 225 Washington, D.C. 20001
ACI	American Concrete Institute P.O. Box 19150 Detroit, MI
AEIC	Association of Edison Illuminating Companies 51 East 42nd Street New York, NY 10017
AFBMA	Anti-Friction Bearing Manufacturer's Association 60 East 42nd Street New York, NY 10017
AGA	American Gas Association 8501 East Pleasant Valley Road Cleveland, OH 44131
AGMA	American Gear Manufacturer's Association 1330 Massachusetts Avenue, N.W. Washington, D.C.
AISC	American Institute of Steel Construction 101 Park Avenue New York, NY 10017
AISI	American Iron and Steel Institute 1000 16th Street, N.W. Washington, D.C. 20036
AITC	American Institute of Timber Construction

Abbreviation	Company
	333 West Hampden Avenue Englewood, CO 80110
AMCA	Air Moving and Conditioning Association, Inc. 30 West University Drive Arlington Heights, IL 60004
ANSI	American National Standards Institute, Inc. 1430 Broadway New York, NY 10018
APA	American Plywood Association 1119 A Street Tacoma, WA 98401
API	American Petroleum Institute 1801 K Street N.W. Washington, DC 20006
ARI	Air-Conditioning and Refrigeration Institute 1814 North Fort Myer Drive Arlington, VA 22209
ASCE	American Society of Civil Engineers 345 East 47th Street New York, NY 10017
ASCII	American Standard Code for Information Interchange United States of America Standards Institute 1430 Broadway New York, NY 10018
ASE Code	American Standard Safety Code for Elevators, Dumbwaiter and Escalators American National Standards Institute 1430 Broadway New York, NY 10018
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers United Engineering Center 345 East 47th Street New York, NY 10017
ASME	American Society of Mechanical Engineers 345 East 47th Street

Abbreviation	Company
	New York, NY 10017
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWPA	American Wood Preservers Association 1625 Eye Street Washington, DC 20006
AWS	American Welding Society 2501 N.W. 7th Street Miami, FL 33125
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
CBM	Certified Ballast Manufacturers 2120 Keith Building Cleveland, OH 44115
CMAA	Crane Manufacturers Association of America, Inc. (Formerly called: Overhead Electrical Crane Institute - OECI) 1326 Freeport Road Pittsburgh, PA 15238
CRSI	Concrete Reinforcing Steel Institute 180 North La Salle Street Chicago, IL 60601
CSA	Canadian Standards Association 178 Rexdale Boulevard Rexdale, Ontario, M9W IR3, Canada
DEMA	Diesel Engine Manufacturer's Association 122 East 42nd Street New York, NY 10017

Abbreviation	Company
DIS	Division of Industrial Safety California Department of Industrial Relations 2422 Arden Way Sacramento, CA 95825
EEI	Edison Electric Institute 90 Park Avenue New York, NY 10016
EIA	Electronic Industries Association 2001 Eye Street N.W. Washington, DC 20006
EJMA	Expansion Joint Manufacturer's Association 331 Madison Avenue New York, NY 10017
ESO	Electrical Safety Orders, California Administrative Code, Title 8, Chap. 4, Subarticle 5 Office of Procurement, Publications Section P.O. Box 20191 8141 Elder Creek Road Sacramento, CA 95820
FEDSPEC	Federal Specifications General Services Administration Specification and Consumer Information Distribution Branch Washington Navy Yard, Bldg. 197 Washington, DC 20407
FEDSTDS	Federal Standards (see FEDSPECS)
FM	Factory Mutual Research 1151 Boston-Providence Turnpike Norwood, MA 02062
HEI	Heat Exchange Institute 122 East 42nd Street New York, NY 10017
HI	Hydraulic Institute

Abbreviation	Company
	1230 Keith Building Cleveland, OH 44115
IAPMO	International Association of Plumbing and Mechanical Officials 5032 Alhambra Avenue Los Angeles, CA 90032
ICBO	International Conference of Building Officials 5360 South Workman Mill Road Whittier, CA 90601
ICEA	Insulated Cable Engineers Association P.O. Box P South Yarmouth, MA 02664
IEEE	Institute of Electrical and Electronics Engineers, Inc. 345 East 47th Street New York, NY 10017
IES	Illuminating Engineering Society C/O United Engineering Center 345 East 47th Street New York, NY 10017
ISA	Instrument Society of America 400 Stanwix Street Pittsburgh, PA 15222
JIC	Joint Industrial Council 7901 Westpark Drive McLean, VA 22101
MILSPEC	Military Specifications Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. 127 Park Street, N.E. Vienna, VA 22180

Abbreviation	Company
NAAMM	National Association of Architectural Metal Manufacturers 100 South Marion Street Oak Park, IL 60302
NACE	National Association of Corrosion Engineers P.O. Box 986 Katy, TX 77450
NEC	National Electric Code National Fire Protection Association 470 Atlantic Avenue Boston, MA 02210
NEMA	National Electrical Manufacturer's Association 155 East 44th Street New York, NY 10017
NESC	National Electric Safety Code American National Standards Institute 1430 Broadway New York, NY 10018
NFPA	National Forest Products Association (Formerly called: National Lumber Manufacturer's Association) 1619 Massachusetts Avenue, N.W. Washington, DC 20036
OSHA	Occupational Safety and Health Act U.S. Department of Labor San Francisco Regional Office 450 Golden Gate Avenue, Box 36017 San Francisco, CA 94102
PPIC	The Plumbing & Piping Industry Council, Inc. Suite 402 510 Shatto Place Los Angeles, CA 90020
SAE	Society of Automotive Engineers 2 Pennsylvania Street New York, NY 10001

Abbreviation	Company
SAMA	Scientific Apparatus Makers Association One Thomas Circle Washington, DC 20005
SBCC	Southern Building Code Congress 1116 Brown-Marx Building Birmingham, AL 35203
SMACNA	Sheet Metal and Air Conditioning Contractors National Association, Inc. 8224 Old Courthouse Road Tysons Corner Vienna, VA 22180
SSPWC	Standard Specifications for Public Works Construction Building News, Inc. 3055 Overland Avenue Los Angeles, CA 90034
TEMA	Tubular Exchanger Manufacturer's Association 331 Madison Avenue New York, NY 10017
UBC	Uniform Building Code Published by ICBO
UL	Underwriters Laboratories Inc. 207 East Ohio Street Chicago, IL 60611
UMC	Uniform Mechanical Code Published by ICBO
UPC	Uniform Plumbing Code Published by IAPMO
USBR	Bureau of Reclamation U.S. Department of Interior Engineering and Research Center Denver Federal Center, Building 67 Denver, CO 80225
WWPA	Western Wood Products Association (Formerly called: West Coast Lumberman's Association - WCLA) Yeon Building Portland, CA 97204

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

- END OF SECTION -

SECTION 01300

SUBMITTALS

PART 1 - GENERAL

1.1 SUBMITTALS

A. Schedule of Work – Critical Path Method (CPM): Submit Schedule of Work – CPM.

B. Shop drawings shall be required for:

1. Division 9 – Carpeting.

2. Division 12 – Shades.

3. Division 12 – Systems Furniture.

4. Division 16 – Electrical Work.

5. Any others as called for in the plans, specifications or by the Engineer.

C. Other required submittals shall include:

1. Samples, Product Data, and MSDS documents.

2. Manufacturer's Data.

3. Certificates of Warranty.

4. Any others as called for in the plans, specifications, or by the Engineer.

1.2 SCHEDULE OF WORK – CRITICAL PATH METHOD (CPM)

A. The Contractor shall submit Schedule of Work within 2 weeks from the effective date noted in the "Notice to Proceed" letter, identifying first workday of each week. Show complete sequence of construction by activity, identifying work of separate stages and other logically grouped activities. Show submittal dates required for shop drawings, product data, samples and product delivery dates.

B. The Schedule of Work shall follow the Critical Path Method (CPM) The project shall not commence until the CPM schedule is submitted and approved. No claims for extensions shall be granted if the CPM schedule is not submitted in accordance with this Section.

1. The Construction Schedule shall address the entire project, to the extent required by the Contract Documents, and shall show an expedient and practical execution of work. If requested by the Engineer, the Contractor shall participate in a preliminary

meeting to discuss the proposed schedule and requirements prior to submitting the schedule.

2. The Construction Schedule shall indicate the following:

   a. Elements of the project in detail time scaled by month or by week, and ta project summary.

   b. The order and interdependence of activities and the sequence in which the work is to be accomplished.

   c. How the start of a given activity is dependent upon the completion of preceding activities and how its completion restricts the start of following activities.

   d. The submittal and approval of shop drawings, samples, procurement of critical materials and equipment, receipt of materials with estimated costs of major items for which payment will be requested in advance of installation, fabrication of special materials and equipment, and their installation and testing.

   e. Activities of the State that have an effect on the progress schedule, such as the required delivery dates for State furnished materials and equipment and other similar items.

   f. The description of the activity and the duration of time in calendar days.

   g. For each activity indicate the start, finish, and total time.

   h. The party responsible for the accomplishment of the activity. At a minimum, indicated responsibility for each listed subcontractor and major vendor.

   i. Contract-required dates for completion of all parts of the Work.

   j. Non-work days such as holidays, or exclusionary non-work days.

3. Upon completion of the Engineer's review, the Contractor shall mend the schedule to reflect the comments. If necessary, the Contractor shall participate in a meeting with the Engineer to discuss the proposed schedule and changes required. Submit the revised schedule for review within 7 calendar days after receipt of the comments.

4. Use the reviewed schedule for planning, organizing and directing the work, for reporting progress, and for requesting payment for work completed. Unless providing an update, do not make changes to the reviewed schedule without the Engineer's approval.

1.3 BIDDER'S SPECIAL RESPONSIBILITY FOR COORDINATING CONTRACTUAL

WORK AND SUBMITTALS:

A. The Contractor is responsible for the coordination of all contractual work and submittals.

B. The Contractor shall have a rubber stamp made up in the following format:

CONTRACTOR NAME

PROJECT: _____

_____

JOB NO: _____

THIS SUBMITTAL HAS BEEN CHECKED BY THIS GENERAL CONTRACTOR. IT IS CERTIFIED CORRECT, COMPLETE, AND IN COMPLIANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS. ALL AFFECTED CONTRACTORS AND SUPPLIERS ARE AWARE OF, AND WILL INTEGRATE THIS SUBMITTAL INTO THEIR OWN WORK.

DATE RECEIVED _____
SPECIFICATION SECTION _____
SPECIFICATION PARAGRAPH _____
DRAWING NUMBER_____
SUBCONTRACTOR NAME _____
SUPPLIER NAME _____
MANUFACTURER NAME _____

CERTIFIED BY: _____

C. This stamp, "filled in", should appear on the title sheet of each shop drawing, on a cover sheet of submittals in an 8-1/2" x 11" format, or on one face of a cardstock tag (min. 3" x 6") tied to each sample. The tag on the samples should state what the sample is so that, if the tag is accidentally separated from the sample, it can be matched up again. The back of this tag will be used by the Engineer for his receipt, review, and log stamp and for any comments that relate to the sample.

D. All submittals for material, equipment, and shop drawings listed in the contract documents, including dimensioned plumbing shop drawings, shall be required and shall be reviewed by the Engineer, prior to any ordering of materials and equipment.

E. Unless otherwise noted, the Contractor shall submit to the Engineer for his review eight copies of all shop drawings, piping layout, and/or catalog cuts for fabricated items and manufactured items (including mechanical and electrical equipment) required for the construction. Drawings shall be submitted in sufficient time to allow the Engineer not less than twenty regular working days for examining the drawings.

F. The drawing shall be accurate, distinct, and complete and shall contain all required information, including satisfactory identification of items, units and assemblies in relation to the contract drawings and specifications.

G. Unless otherwise approved by the Engineer, shop drawings shall be submitted only by the Contractor, who shall indicate by a signed stamp on the drawings or other approved means that the Contractor has checked the shop drawings and that the work or equipment shown is in accordance with contract requirements and has been checked for dimensions and relationship with work of all other trades involved. All deviations from the plans and specifications shall be listed. The practice of submitting incomplete or unchecked shop drawings for the Engineer to correct or finish will not be acceptable, and shop drawings which, in the opinion of the Engineer, clearly indicate that they have not been checked by the Contractor will be considered as not complying with the intent of the contract documents and will be returned to the Contractor for resubmission in the proper form.

H. When the shop drawings have been reviewed by the Engineer, two sets of submittals will be returned to the Contractor appropriately stamped. If major changes or corrections are necessary, the drawing may be rejected and one set will be returned to the Contractor with such changes or corrections indicated, and the Contractor shall correct and resubmit eight copies of the drawings, unless otherwise directed by the Engineer. No changes shall be made by the Contractor to the resubmitted shop drawings other than those changes indicated by the Engineer. The resubmittal shall be so indicated on the shop drawing.

I. The review of such drawings and catalog cuts by the Engineer shall not relieve the Contractor from responsibility for correctness of the dimensions, fabrication details, and space requirements or for deviations from the contract drawings and specifications, unless the Contractor has called attention to such deviations, in writing, by a letter accompanying the drawings and the Engineer approved the change or deviations, in writing, at the time of submission; nor shall review by the Engineer relieve the Contractor from the responsibility for errors in the shop drawings. When the Contractor does call such deviations to the attention of the Engineer, he shall state in his letter whether or not such deviations involve any deduction or extra cost adjustment.

J. The approval of the above drawings, lists, prints, specifications, or other data shall in no way release the Contractor from his responsibility for the proper fulfillment of the requirements of this contract nor for fulfilling the purpose of the installation nor from his liability to replace the same should it prove defective or fail to meet the specified requirements.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01505

MOBILIZATION AND DEMOBILIZATION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Description: This section covers the requirements for mobilization and demobilization.

1.2 MOBILIZATION: Mobilization shall consist of the transporting, assembling, constructing, installing, and making ready for use at the job site, all the equipment, machinery, structures, utilities, materials, labor, and incidentals necessary to do the work covered by this contract.

1.3 DEMOBILIZATION: Demobilization shall consist of the dismantling and removal of the above-mentioned equipment, machinery, structures, utilities, materials, and incidentals, and the cleaning up of the site.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 GUIDELINES: If the Contractor utilizes private lands other than the sites provided by the Department for mobilization purposes, the provisions of this section shall apply, and the mobilization and demobilization work on said private lands shall be in accordance with the agreement between the Contractor and the land owner.

Any and all additional mobilization or demobilization costs in excess of the maximum amounts specified in the Proposal shall be included in the appropriate unit prices bid in the Proposal. The Contractor shall not receive any compensation for mobilization and demobilization in addition to those specified in the Proposal.

All equipment, machinery, buildings, utilities and incidentals mobilized and demobilized under this section shall remain the property of the Contractor.

END OF SECTION

SECTION 01530

BARRICADES

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Description. This work shall consist of furnishing, installing and maintaining barricades in accordance with the requirements of the contract.

Barricade application shall be provided for in the latest edition of the FHWA publication, Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), and as amended.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Lumber: Lumber for rails, frames and braces shall be dry, sound, undamaged, well seasoned, and free from any defect which may impair their strength and durability.

B. Hardware: Nails shall be galvanized wire nails. As many and as large a size as is practicable shall be used.

C. Paints: Paints shall be exterior enamel paint of the best grade or first line as made by approved manufacturers.

D. Sheet Reflecting Material: Sheet reflecting material shall conform to the applicable requirements of Subsection 712.20(C) of the "Standard Specifications for Road and Bridge Construction".

E. Alternate Designs: Alternate barricade designs such as plastic molded barricades may be used subject to the Engineer's approval. The Contractor shall submit shop drawings or catalog cuts for approval.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

A. General: Barricades shall be constructed in a first class, workmanlike manner in accordance with details shown on the plans and as specified herein.
Barricades shall be in good condition and approved by the Engineer for use within the project limits. Barricade application and installation shall be as shown on the and as directed plans by the Engineer in accordance with the guidelines provided in the latest edition of the FHWA publication, Manual on Uniform Traffic Control Devices for Streets

and Highways (MUTCD), and any amendments or revisions thereof as may be made from time to time.

Sand bags or other approved weights shall be provided where required or as directed by the Engineer. Sand bags or other approved weights shall not be placed on any striped barricade rail.

Steady burn and/or flashing lamps shall be required on selected barricades used during hours of darkness. Locations shall be as shown on the plans and as directed by the Engineer. Lamps shall be attached on the barricade ends closest to the traveled way and shall be visible to the motorist.

Barricades furnished and paid for as provided for as provided herein may be used for temporary detours, construction phasing, or other temporary traffic control work.

Barricades furnished and paid for use in temporary detours or construction phasing may be used for permanent location called for on the plans.

Upon completion of the construction work, barricades shall be left in place, relocated, or removed and disposed of as shown on the plans or as directed by the Engineer. Barricades left in place, or relocated to new permanent locations shall become the property of the State. Barricades directed to be removed and disposed of shall become the property of the Contractor.

B. Painting: Wooden rails, frames and braces shall be given a prime coat and 2 finish coats of new white exterior enamel paint. Rail faces to be reflectorized may be left unpainted unless otherwise specified or directed.

C. Reflectorization: Reflectorization of barricade rails shall be done in a first class, workmanlike manner and the attachment of reflective sheeting shall be as shown on the plans, specified herein, or as directed and approved by the Engineer.

Both vertical faces of each barricade rail shall be reflectorized as shown on the plans.

Wooden rails shall be reflectorized with one of the following:

1. Reflective sheeting specified in Subsection 712.20(C)(4) of the "Standard Specifications for Road and Bridge Construction" and backed with a 26 gage galvanized steel sheet, or

2. a hardened aluminum backed reflective sheeting as specified in Subsection 712.20(C)(5) of the "Standard Specifications for Road and Bridge Construction."

D. Color: Rails, frames and braces shall be white.

The front and back faces of barricade rails shall have 6-inch wide alternative colored and white striped sloping downward toward the traveled way at an angle of 45 degrees with the

vertical. The colored stripes shall be either orange or red in accordance with the following requirements:

1. Orange and white stripes shall be used in the following conditions:

    a. Construction work.

    b Detours.

    c. Maintenance work.

2. Red and white stripes shall be used in the following conditions:

    a. On roadways with no outlet (ie. dead-ends, cul-de-sacs).

    b. Ramps or lanes closed for operational purposes.

    c Permanent or semipermanent closure or termination of a roadway.

E. Maintenance: Barricades shall be kept in good condition throughout their usage during construction until the end of the contract.

F. The Contractor shall repair, repaint, clean or replace the barricades as required and as directed by the Engineer to maintain their effectiveness and appearance.

The Constructor shall immediately replace all lost, stolen or damaged barricades, lamps, sand bags and other approved weights.

Barricades used during construction phasing, temporary detours or other temporary traffic control work shall be cleaned and repaired as necessary, prior to being relocated to a permanent location shown on the plans or as directed.

No extra payment will be made for any repair work, repainting, or cleaning of barricades. The Engineer shall determine the suitable condition of each barricade and shall determine when each barricade shall be repaired, repainted or cleaned.

END OF SECTION

SECTION 01567

POLLUTION CONTROL

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Rubbish Disposal

1. No burning of debris and/or waste materials shall be permitted on the project site.

2. No burying of debris and/or waste material except for materials which are specifically indicated elsewhere in these specifications as suitable for backfill shall be permitted on the project site.

3. All unusable debris and waste material shall be hauled away to an appropriate off-site dump area. During loading operations, debris and waste materials shall be watered down to allay dust.

4. No dry sweeping shall be permitted in cleaning rubbish and fines which can become airborne from floors or other paved areas. Vacuuming, wet mopping or wet or damp sweeping is permissible.

5. Enclosed chutes and/or containers shall be used for conveying debris from above to ground floor level.

6. Clean-up shall include the collection of all waste paper and wrapping materials, cans, bottles, construction waste materials and other objectionable materials, and removal as required. Frequency of clean-up shall coincide with rubbish producing events.

B. Dust

1. The Contractor shall prevent dust from becoming airborne at all times including non-working hours, weekends and holidays in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 60 - Air Pollution Control.

2. The method of dust control and costs shall be the responsibility of the Contractor. Methods of dust control shall include the use of water, chemicals or asphalt over surfaces which may create airborne dust.

3. The Contractor shall be responsible for all damage claims in accordance with Section 7.16 - "Responsibility for Damage Claims" of the GENERAL CONDITIONS.

C. Noise

1. Noise shall be kept within acceptable levels at all times in conformance with the State Department of Health, Administrative Rules, Title 11, Chapter 46 - Community Noise Control for Oahu. The Contractor shall obtain and pay for the Community Noise Permit from the State Department of Health when the construction equipment or other devices emit noise at levels exceeding the allowable limits.

2. All internal combustion engine-powered equipment shall have mufflers to minimize noise and shall be properly maintained to reduce noise to acceptable levels.

3. Pile driving operations shall be confined to the period between 9:00 a.m. and 5:30 p.m., Monday through Friday. Pile driving will not be permitted on weekends and legal State and Federal holidays.

4. Starting-up of construction equipment meeting allowable noise limits shall not be done prior to 6:45 a.m. without prior approval of the Engineer. Equipment exceeding allowable noise levels shall not be started-up prior to 7:00 a.m.

D. Others

1. Wherever trucks and/or vehicles leave the site and enter surrounding paved streets, the Contractor shall prevent any material from being carried onto the pavement. Waste water shall not be discharged into existing streams, waterways, or drainage systems such as gutters and catch basins unless treated to comply with the State Department of Health water pollution regulations.

2. Trucks hauling debris shall be covered as required by PUC Regulation. Trucks hauling fine materials shall be covered.

3. No dumping of waste concrete will be permitted at the job-site.

4. When spray painting is allowed such spray painting shall be done by the "airless spray" process. Other types of spray painting will not be allowed.

E. Suspension of Work

1. Violations of any of the above requirements or any other pollution control requirements which may be specified in the Technical Specifications herein shall be cause for suspension of the work creating such violation. No additional compensation shall be due the Contractor for remedial measures to correct the offense. Also, no extension of time will be granted for delays caused by such suspensions.

2. If no corrective action is taken by the Contractor within 72 hours after a suspension is ordered by the Engineer, the State reserves the right to take whatever action is

necessary to correct the situation and to deduct all costs incurred by the State in taking such action from monies due the Contractor.

3. The Engineer may also suspend any operations which he feels are creating pollution problems although they may not be in violation of the above-mentioned requirements. In this instance, the work shall be done by force account as described in Subsection 4.2b -"Additional Work" of the GENERAL CONDITIONS and paid for in accordance with Subsection 8.4b - "Force - Account Work" therein. The count of elapsed working days to be charged against the contract in this situation shall be computed in accordance with Subsection 7.18 - "Contract Time" of the GENERAL CONDITIONS.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01715

EXISTING CONDITIONS - ASBESTOS / LEAD / HAZARDOUS MATERIAL SURVEY

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

As specified in Section 01019 - GENERAL SPECIFICATIONS, Special Provisions, and the General Conditions of the Contract.

1.2 DESCRIPTION OF WORK

Accomplish all demolition and removal indicated on or required by the drawings, and as specified herein.

1.3 GENERAL REQUIREMENTS

A. This section includes the results of the State's surveys for Asbestos Containing Materials, Lead-Containing Paint, and other hazardous materials; and is provided for the Contractor's information.

B. Related Sections include the following: SECTION 13282 - LEAD PAINT CONTROL MEASURES

1.4 ASBESTOS

A. The structure or structures to be renovated or modified under this contract were surveyed for the presence of asbestos containing material (ACM), using NESHAP requirements. ACM was identified in the areas to be renovated or modified. A copy of the initial survey report, as well as any subsequent supplemental survey report(s) if performed, is included in this Section.

1. The report(s) are included for the Contractor's information. Review the attached report(s) for other materials to be disturbed. The Contractor may perform further surveys at its own expense, if ACBM not shown in the report(s) is suspected in the areas of the building(s) in which work will be performed. If ACBM is found, notify the Engineer immediately. The Engineer will reimburse the Contractor for the testing cost if ACBM is found.

2. If there is ACBM outside of the area 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

State of Hawaii: Occupational Safety and Health Administration 29 CFR 1926.1101, Asbestos.

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.

1.5 LEAD

A. Inform employees, Subcontractors and all other persons engaged in the project that lead paints are present in the existing building(s) and at the job site. Conduct work in accordance with the requirements of OSHA 29 CFR 1926.62 Lead.

B. Review the attached lead testing data which was for design purposes only, and the results do not satisfy any of the requirements of 29 CFR 1926.62 Lead.

C. Lead was identified in the suite #110, L-shaped counter top and L-shaped counter wall.

1.6 POLYCHLORINATED BIPHENYLS

A. Review the attached PCBs testing data which was for design purposes only, and the results do not satisfy any of the OSHA Requirements.

B. PCBs were not detected in the black floor mastic.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 SURVEY ATTACHED

Limited Hazardous Material Survey, DLNR-ASO Office Improvements, Suite 110/111, Kalanimoku Building, 33 pages, dated December 2025, prepared by EnviroQuest, Inc.

END OF SECTION

EnviroQuest

SERVICES

HAZMAT Inspections

Remediation Design

Asbestos Management

Lead Management

Lead Risk Assessment

Industrial Hygiene

Indoor Air Quality

Mold Assessment

Environmental Site Assessments

Subsurface Investigation

Water Sampling

Asbestos Training

Lead Training

OSHA Training

OSHA Compliance

LIMITED HAZARDOUS MATERIAL SURVEY

DLNR-ASO OFFICE IMPROVEMENTS
SUITE 110/111, KALANIMOKU BUILDING
HONOLULU, HAWAII

EnviroQuest Project: 304749

December 2025

Prepared for:

Omizu Architecture, Inc.
826 Kaheka Street, #305
Honolulu, HI 96814

Prepared by:

EnviroQuest, Inc.
98-029 Hekaha Street, Suite 21
Aiea, Hawaii 96701
808.486.5881

David Leigh
David Leigh
PM/CIH

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TABLES

APPENDICES

1 INTRODUCTION

A limited hazardous material survey (HMS) was conducted on December 15, 2025, at Suite 110/111 in the Kalanimoku Building, 1151 Punchbowl Street, Honolulu, Hawaii.

The purpose of the activities under this project was to perform an inspection to identify asbestos-containing materials (ACMs), lead-based paint (LBP) and polychlorinated biphenyls (PCBs) that would require special demolition, handling, or disposal requirements.

1.1 SITE LOCATION

The listed area was included in our inspection:

- Suite 110/111

2 ASBESTOS

Fifteen samples were collected from suspect asbestos-containing materials.

2.1 METHODOLOGY

A visual inspection for suspect ACM and homogeneous areas (areas that have uniform color, texture, and appearance) was conducted. Suspect materials were divided into three Environmental Protection Agency (EPA) categories:

- Surfacing Materials (sprayed or troweled-on materials)
- Thermal Systems Insulations (materials generally applied to various mechanical systems)
- Miscellaneous Materials (any materials which do not fit in the above categories)

Sampling methodology generally followed the procedures presented in EPA 40 CFR 763 *Asbestos* Subpart E *Asbestos Containing Materials in Schools* and Hawaii Department of Health (HDOH), Hawaii Administrative Rules (HAR) Titles 11-501 *Asbestos Requirements* and 11-502 *Asbestos Containing Materials in Schools*.

While sampling locations were selected randomly to represent homogenous materials, sampling was confined to materials which were readily accessible and did not involve the destruction of physical barriers.

2.2 RESULTS

Samples were submitted to Hawaii Analytical Laboratory, LLC. (HAL) in Honolulu, Hawaii, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. The samples were analyzed by EPA method 40 CFR 763, Appendix E to Subpart E *Interim Method of the Determination of Asbestos in Bulk Insulation Samples* and EPA Method 600/R-93-116 *Method for Determination of Asbestos in Bulk Building Materials.* HAL is also registered to provide asbestos laboratory services in Hawaii under HDOH 11-504 *Asbestos Abatement Certification Program.*

Based on the laboratory analytical results, asbestos was identified in three of the 15 samples. All three samples were determined to be asbestos-containing material (ACM), materials containing more than 1% asbestos. In accordance with the National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR 61 Part M, samples consisting of distinct layers of materials were analyzed and reported separately by the laboratory. NESHAP also states that if asbestos is identified in amounts less than 10%, the owner or operator of the building must elect to assume the amount to be greater than 1% and treat the material as asbestos-containing material or request verification of the amount by point counting. No samples were point counted for this report. The results are summarized in Table 1.

Refer to the accompanying appendices for laboratory analytical results and photographs.

3 LEAD

Five paint film samples were collected from painted or coated materials.

3.1 METHODOLOGY

A visual inspection for painted or coated building surfaces was conducted. Sampling methodology generally followed the procedures presented in the U.S. Department of Housing and Urban Development's document *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing,* EPA 40 CFR 745 *Lead-Based Paint Poisoning Prevention in Certain Residential Structures,* and ASTM E1729 *Standard Practice for Field Collection of Dried Paint Samples for Subsequent Lead Determination.*

3.2 RESULTS

Samples were submitted to HAL, an American Industrial Hygiene Association (AIHA) accredited laboratory with a specific accreditation for lead analysis under AIHA Environmental Lead Laboratory Accreditation Program. The samples were analyzed by NIOSH Method 7082m *Lead by Flame Atomic Absorption Spectroscopy (FAAS).*

Based on the laboratory analytical results, none of the samples exceeded EPA guidelines for lead in paint. The EPA defines lead-based paint as paint or other coatings containing lead equal to, or in excess of 0.5% lead by weight. However, lead at concentration below the EPA guidelines was detected in one sample. For the purpose of this report, the paint is identified as paint with lead (PWL), paint having a lead concentration greater than the laboratory analytical detection limit but less than 0.5% lead by weight. The results are summarized in Table 2.

Refer to the accompanying appendices for laboratory analytical results and photographs.

4 POLYCHLORINATED BIPHENYLS

One sample was collected from suspect PCB-containing material.

4.1 METHODOLOGY

The sample was collected from the black floor mastic that will be impacted by the planned renovation work.

4.2 RESULTS

The sample was submitted to HAL for analysis via EPA Method 8082A, *Polychlorinated Biphenyls by Gas Chromatography.*

Based on the laboratory analytical result, PCBs were not detected in the sample. Building products found to contain ≥ 50 ppm PCBs are classified as PCB bulk product waste under federal regulations through the Toxics Substances Control Act (TSCA). The result is summarized in Table 3.

Refer to the accompanying appendices for laboratory analytical result and photograph.

5 SUMMARY

5.1 ASBESTOS

Based on this inspection, the listed materials are identified as asbestos-containing materials.

Material	Location	Condition
12”x12” tan vinyl floor tiles with streaks and associated black floor mastic	Suite 110 and 111 (under carpet in Suite 110)	Good

If the ACMs are likely to be disturbed during the renovation work, the materials must be removed by a certified asbestos abatement contractor under controlled conditions in accordance with EPA and HDOH regulations. Work should also be monitored by an independent industrial hygiene professional who is also accredited as an Asbestos Project Monitor.

5.2 LEAD

Lead-based paint was not identified. However, paint/coating with lead was identified in the L-shaped counter brown wood wall. Prior to the disturbance of any PWL, the contractor’s employees disturbing the painted/coated material must be informed that it contains lead and must conduct all lead disturbance work in accordance with Occupational Safety and Health Administration (OSHA) 29 CFR 1926.62 *Lead*. If any untested paints are disturbed, they should be assumed to contain lead.

5.3 POLYCHLORINATED BIPHENYLS

PCBs were not detected in the black floor mastic.

6 LIMITATIONS

The information set forth is based solely on the agreed upon scope of services, on personal observation, laboratory data, and information provided by Omizu Architecture, Inc.

Although this inspection provides information on the relative presence or absence of asbestos-containing material, lead based paint and PCBs, it should not be construed as a final statement that all hazardous materials have been identified.

Given the often obscure and elusive nature of hazardous materials, it is never possible to absolutely dismiss the possibility of additional hazardous materials. EnviroQuest, Inc. expressly disclaims any and all liability, representations, expressed or implied, contained in, or for omission from this report, or any other written or oral communication which might be interpreted as establishing the total extent of all liability present at the subject property.

Our services have been performed with usual thoroughness and competence of the consulting profession, in accordance with the standard of professional services at this time. No other warranty or representation, either expressed or implied is included or intended.

Any question regarding our work and this report, the presentation of the information, and the interpretation of the data are welcome and should be referred to the undersigned. EQI greatly appreciates this opportunity to assist you with your industrial hygiene needs. We look forward to working with you again in the future.

TABLE 1: ASBESTOS SAMPLING SUMMARY

Homogenous Material	ACM[1] (Y/N)	Location	Sample ID	Friable (Y/N)	Est Qty (ACM) (ft^2)	Condition[2]	Photo No.
12" x 12" tan vinyl floor tile with streaks and black mastic	Y (tiles & mastic)	Suite 110 and 111, floor (under carpet in Suite 110)	304749-01A 304749-01B 304749-01C	N	-	G	3, 4, 5, 10, 11
Brown cove base with brown mastic	N	Suite 110 and 111, wall base	304749-02A 304749-02B 304749-02C	N	-	G	6, 12
Gypsum wallboard	N	Suite 110 and 111, partition walls	304749-03A 304749-03B 304749-03C 304749-03D 304749-03E	N	-	G	7
Brown cove base with brown mastic	N	Suite 110, L-shaped counter, wall base	304749-04A 304749-04B 304749-04C	N	-	G	6
Tan mastic	N	Suite 110, carpet mastic (asbestos floor tiles located under carpet)	304749-05A 304749-05B 304749-05C	N	-	G	3, 4, 5

1. ACM=>1% asbestos content
2. Good (G); Damaged (D) <10% distributed or 25% localized; Significant Damage (SD), >10% distributed or 25% localized

TABLE 2: LEAD PAINT SAMPLING SUMMARY

Paint Color	Int/Ext	LBP[1] (Y/N)	PWL[2] (Y/N)	Paint Location	Sample ID	Results (% Wt)	Condition[3,4]	Photo No.
Off-white	Int	N	N	Suite 110 and 111, CMU walls	304749-01P	< 0.004	Intact	14
Off-white	Int	N	N	Suite 110 and 111, concrete walls	304749-02P	< 0.004	Intact	14
Off-white	Int	N	N	Suite 110 and 111, gypsum wall	304749-03P	< 0.004	Intact	7, 13
Off-white	Int	N	N	Suite 110, L-shaped counter, top	304749-04P	< 0.012	Intact	8
Brown	Int	N	Y	Suite 110, L-shaped counter, wall	304749-05P	0.0087	Intact	8

1. LBP = >0.5% lead by weight
2. PWL = >laboratory detection limit but <0.5%
3. Exterior: Intact – Entire surface is intact; Fair - ≤ 10ft^2; Poor - >10 ft^2
4. Interior: Intact – Entire surface is intact; Fair - ≤ 2ft^2 or ≤ 10%; Poor - >2 ft^2 or >10%

TABLE 3: POLYCHLORINATED BIPHENYLS SAMPLING SUMMARY

Material	Int/Ext	PCB[1] (Y/N)	Sample Location	Sample ID	Results (mg/kg)	Photo No.
Black mastic	Int	N	Suite 110 and 111, concrete floor	304749-01PCB	ND	3, 4, 5, 10, 11

1. PCB = >laboratory detection limit
ND = None Detected

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APPENDIX A

REFERENCE PHOTOGRAPHS

REFERENCE PHOTOGRAPHS

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Photo 1: Kalanimoku Building

Photo 2: Kalanimoku Building

Room 110.

Photo 3: Kalanimoku Building

Room 110.

Asbestos containing tan 12”x12” tan vinyl floor tiles with streaks and black mastic under carpet.

Asbestos was not detected in the tan carpet mastic.

PCBs were not detected in the black mastic.

Photo 4: Kalanimoku Building

Room 110.

Asbestos containing tan 12”x12” tan vinyl floor tiles with streaks and black mastic under carpet.

Asbestos was not detected in the tan carpet mastic.

PCBs were not detected in the black mastic.

Photo 5: Kalanimoku Building

Room 110.

Asbestos containing tan 12”x12” tan vinyl floor tiles with streaks and black mastic under carpet.

Asbestos was not detected in the tan carpet mastic.

PCBs were not detected in the black mastic.

Photo 6: Kalanimoku Building

Room 110.

L-shaped counter.

Asbestos was not detected in the brown cove base with brown mastic.

Photo 7: Kalanimoku Building

Room 110.

Asbestos was not detected in the off-white painted gypsum wall.

Lead was not detected in the off-white paint.

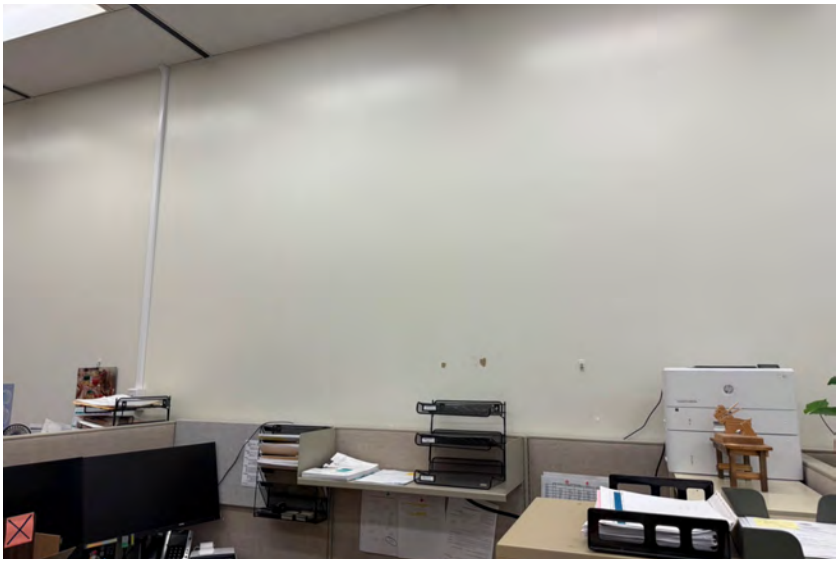


Photo 8: Kalanimoku Building

Room 110.

L-shaped wood counter.

Lead was detected in the brown varnish wood wall.

Lead was not detected in the off-white top.

Photo 9: Kalanimoku Building

Room 111.

Photo 10: Kalanimoku Building

Room 111.

Asbestos containing tan 12”x12” tan vinyl floor tiles with streaks and black mastic under carpet.

PCBs were not detected in the black mastic.

Photo 11: Kalanimoku Building

Room 111.

Asbestos containing tan 12”x12” tan vinyl floor tiles with streaks and black mastic under carpet.

PCBs were not detected in the black mastic.

Photo 12: Kalanimoku Building

Room 111.

Asbestos was not detected in the brown cove base with brown mastic.

Photo 13: Kalanimoku Building

Room 111.

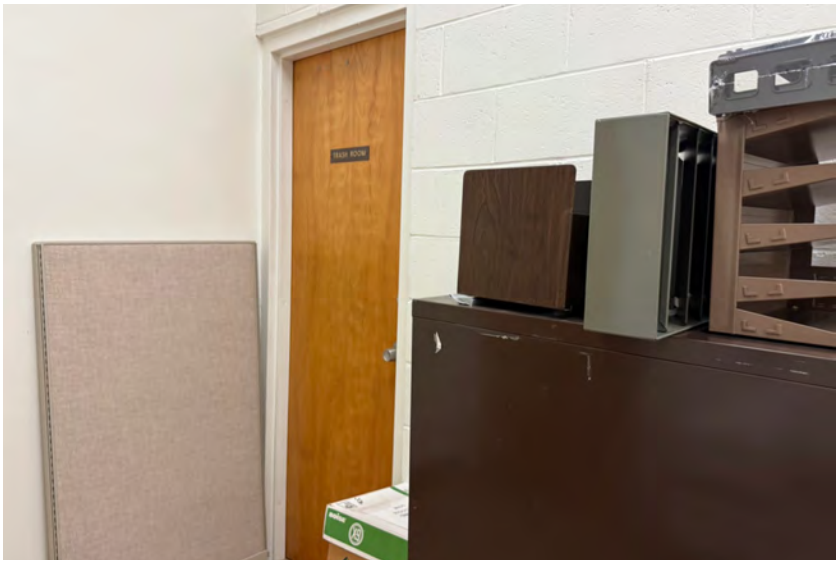
Asbestos was not detected in the off-white painted gypsum wall.

Lead was not detected in the off-white paint.

Photo 14: Kalanimoku Building

Room 111.

Lead was not detected in the off-white paint on the concrete/CMU wall.



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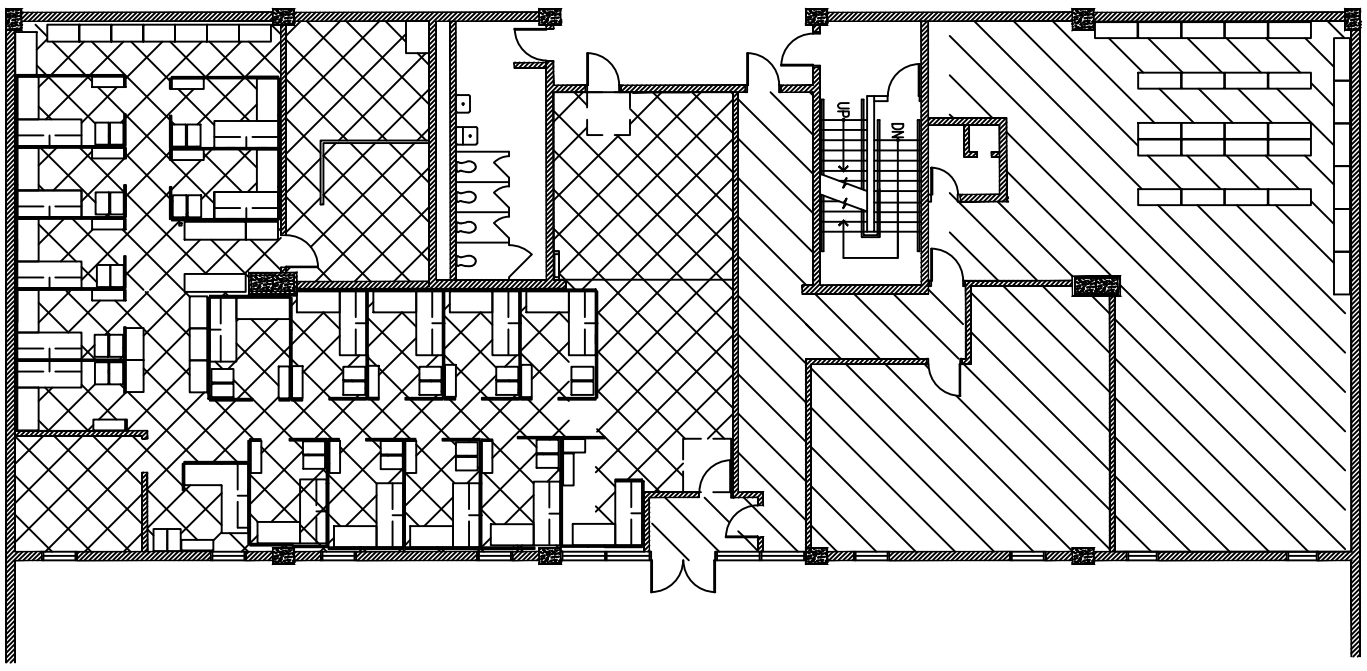
APPENDIX B

ASBESTOS
ACM LOCATION DRAWING
LABORATORY ANALYTICAL REPORT

LEGEND

12"x12" TAN VINYL FLOOR TILES AND BLACK MASTIC

12"x12" TAN VINYL FLOOR TILES AND BLACK MASTIC UNDER CARPET



DRAWN BY: DSL	ASBESTOS CONTAINING MATERIAL LOCATION
CHECKED BY EN	
DATE: DEC 2025	SUITE 110/111
JOB NO. 304749	
SHEET NO. H-1	KALANIMOKU BUILDING

EnviroQuest

Hawaii Analytical Laboratory
ANALYTICAL REPORT

Thursday, December 18, 2025

EnviroQuest, Inc.
98-029 Hekaha Street, Suite 21
Aiea HI 96701

Phone Number: (808)486-5881
Facsimile: (808) 486-5889
Email: eqi@enviroquestinc.com

Lab Job No: 202511120
Date Submitted: 12/16/2025
Your Project: 304749 DLNR ASO Office, 12/15/25

Bulk Asbestos Determination

Lab Sple No.	Sample ID / Description	Asbestos Present?	Type	%v/v	Other Fibrous	%v/v	Matrix	Date Analyzed
202583309	**304749-01A**	**Yes**	Chrysotile	**8**	None detected		Tar	12/17/2025
Layer	Black mastic							
Comments								
202583309	**304749-01A**	**Yes**	Chrysotile	**< 1**	None detected		Vinyl	12/17/2025
Layer	Tan vinyl floor tile							
Comments								
202583310	**304749-01B**	**Yes**	Chrysotile	**8**	None detected		Tar	12/17/2025
Layer	Black mastic							
Comments								
202583310	**304749-01B**	**Yes**	Chrysotile	**< 1**	None detected		Vinyl	12/17/2025
Layer	Tan vinyl floor tile							
Comments								
202583311	**304749-01C**	**Yes**	Chrysotile	**8**	None detected		Tar	12/17/2025
Layer	Black mastic							
Comments								
202583311	**304749-01C**	**Yes**	Chrysotile	**< 1**	None detected		Vinyl	12/17/2025
Layer	Tan vinyl floor tile							
Comments								
202583312	**304749-02A**		NONE DETECTED		None detected		Vinyl	12/17/2025
Layer	Brown covebase							
Comments								

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Bulk Asbestos Determination

Lab Sple No.	Sample ID / Description	Asbestos Present?	Type	%v/v	Other Fibrous	%v/v	Matrix	Date Analyzed
202583312	**304749-02A**		NONE DETECTED		None detected		Binder	12/17/2025
Layer	Brown mastic							
Comments								
202583313	**304749-02B**		NONE DETECTED		None detected		Vinyl	12/17/2025
Layer	Brown covebase							
Comments								
202583313	**304749-02B**		NONE DETECTED		None detected		Binder	12/17/2025
Layer	Brown mastic							
Comments								
202583314	**304749-02C**		NONE DETECTED		None detected		Vinyl	12/17/2025
Layer	Brown covebase							
Comments								
202583314	**304749-02C**		NONE DETECTED		None detected		Binder	12/17/2025
Layer	Brown mastic							
Comments								
202583315	**304749-03A**		NONE DETECTED		Fibrous glass (amorphous) + cellulose (undulose)	**15**	Gypsum + paint	12/17/2025
Layer	White drywall / paint							
Comments								
202583316	**304749-03B**		NONE DETECTED		Fibrous glass (amorphous) + cellulose (undulose)	**15**	Gypsum + paint	12/17/2025
Layer	White drywall / paint							
Comments								
202583317	**304749-03C**		NONE DETECTED		Fibrous glass (amorphous) + cellulose (undulose)	**15**	Gypsum + paint	12/17/2025
Layer	White drywall / paint							
Comments								

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Your Project: 304749 DLNR ASO Office, 12/15/25

Bulk Asbestos Determination

Lab Sple No.	Sample ID / Description	Asbestos Present?	Type	%v/v	Other Fibrous	%v/v	Matrix	Date Analyzed
202583318	**304749-03D**		NONE DETECTED		Fibrous glass (amorphous) + cellulose (undulose)	**15**	Gypsum + paint	12/17/2025
Layer	White drywall / paint							
Comments								
202583319	**304749-03E**		NONE DETECTED		Fibrous glass (amorphous) + cellulose (undulose)	**15**	Gypsum + paint	12/17/2025
Layer	White drywall / paint							
Comments								
202583320	**304749-04A**		NONE DETECTED		Cellulose (undulose)	**55**	Paint	12/17/2025
Layer	Beige paint / brown paper							
Comments								
202583320	**304749-04A**		NONE DETECTED		None detected		Vinyl	12/17/2025
Layer	Brown covebase							
Comments								
202583320	**304749-04A**		NONE DETECTED		None detected		Binder + paint	12/17/2025
Layer	Brown mastic / off-white paint							
Comments								
202583321	**304749-04B**		NONE DETECTED		Cellulose (undulose)	**55**	Paint	12/17/2025
Layer	Beige paint / brown paper							
Comments								
202583321	**304749-04B**		NONE DETECTED		None detected		Vinyl	12/17/2025
Layer	Brown covebase							
Comments								
202583321	**304749-04B**		NONE DETECTED		None detected		Binder + paint	12/17/2025
Layer	Brown mastic / off-white paint							
Comments								

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Date Submitted: 12/16/2025
Your Project: 304749 DLNR ASO Office, 12/15/25

Bulk Asbestos Determination

Lab Sple No.	Sample ID / Description	Asbestos Present?	Type	%v/v	Other Fibrous	%v/v	Matrix	Date Analyzed
202583322	**304749-04C**		NONE DETECTED		Cellulose (undulose)	**55**	Paint	12/17/2025
Layer	Beige paint / brown paper							
Comments								
202583322	**304749-04C**		NONE DETECTED		None detected		Vinyl	12/17/2025
Layer	Brown covebase							
Comments								
202583322	**304749-04C**		NONE DETECTED		None detected		Binder + paint	12/17/2025
Layer	Brown mastic / off-white paint							
Comments								
202583322	**304749-04C**		NONE DETECTED		None detected		Binder + calcite	12/17/2025
Layer	White mastic							
Comments								
202583323	**304749-05A**		NONE DETECTED		None detected		Binder	12/17/2025
Layer	Tan mastic							
Comments								
202583324	**304749-05B**		NONE DETECTED		None detected		Binder	12/17/2025
Layer	Tan mastic							
Comments								
202583325	**304749-05C**		NONE DETECTED		None detected		Binder	12/17/2025
Layer	Tan mastic							
Comments								

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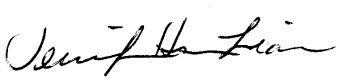
Lab Job No: 202511120
Date Submitted: 12/16/2025
Your Project: 304749 DLNR ASO Office, 12/15/25

General Comments
The bulk sample[s] analysis subject of this analytical report were conducted in general accordance with the procedures outlined in the United States Environmental Protection Agency's "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA-600/M4-82-020, Dec. 1982) and / or "Method for Determination of Asbestos in bulk Building Materials" (EPA-600/R-93-116, July 1993). The analysis of each bulk sample relates only to the material examined, and may or may not represent the overall composition of its original source. Floor tile and other resinously bound materials, when analyzed by the EPA methods referenced above may yield false negative results because of limitations in separating closely bound fibers and in detecting fibers of small length and diameter. Gravimetric treatment, which HAL does not offer, may also be appropriate for certain NOB (non-friable organically bound) materials. Unless specifically requested by clients, NOB samples can be subcontracted to a NVLAP accredited lab, or else, they will be analyzed by HAL using regular PLM technique. In addition, alternative methods of identification, including Transmission Electron Microscopy (TEM) may or may not be applicable. We utilize calibrated visual area estimation on a routine basis and do not conduct point counting unless specifically requested to do so. Estimated error for the visual determinations presented are 75% relative (<1 to 10%), 65% relative (11 to 19%), 50% relative (20 to 34%); 40% relative (35 to 50%), 35% relative (51 to 60%), and 25% relative (>60% v/v). We will not separate layers which in our opinion are not readily discernable. This report is not to be duplicated except in full without the expressed written permission of Hawaii Analytical Laboratory. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of Federal Government. Unless otherwise indicated, the sample condition at the time of receipt was acceptable.

Results and Symbols Definitions
> This testing result is greater than the numerical value listed.
< This testing result is less than the numerical value listed.
None Detected = asbestos was not observed in the sample. If trace amount of asbestos was detected below our quantifiable limits of 1.0%, <1% (trace) would be indicated and the asbestos type listed. Point counting, where applicable, are recommended to improve accuracy.



Jennifer Hsu Liao
Laboratory Manager

EnviroQuest

202511120

PLM DATA SHEET

Project No. 304749 Project Name: DLNR · ASO office 110/111 Date: 12/15/25

Page: 1 of 2

Material Description: 12x12 VFT tan/w streaks and black mastic — Friable / Non-friable

Sample No.	Location	
304749-01A	111, floor	202583309
01B	" "	202583310
01C	110, floor (under carpet)	202583311

CONDITION:	% Damaged:	% Localized:	% Distributed:	Total Material Quantity:

Surfacing Material		TSI		Misc.	
☐ Sig. Damage	% Crumbling -	☐ Sig. Damage	% Gouge/Punct -	☐ Sig. Damage	% Crumbling -
☐ Damaged	% Delaminating -	☐ Damaged	% Crushed -	☐ Damaged	% Delaminating -
☐ Good Cond.	% H_2O/Gouges -	☐ Good Cond.	% H_2O Stains -	☐ Good Cond.	% H_2O/Gouges-

Contact Potential	☐ High	☐ Moderate	☐ Low
Vibration Potential	☐ High	☐ Moderate	☐ Low
Air Erosion	☐ High	☐ Moderate	☐ Low
OVERALL POTENTIAL RATING	☐ Significant Damage	☐ Damage	☐ Minimal Damage

Material Description: brown cove base/brown adhesive — Friable / (Non-friable)

~~Sample~~ No.	Location	
304749-02A	111, wall base	202583312
02B	" "	202583313
02C	" "	202583314

CONDITION:	% Damaged:	% Localized:	% Distributed:	Total Material Quantity:

Surfacing Material		TSI		Misc.	
☐ Sig. Damage	% Crumbling -	☐ Sig. Damage	% Gouge/Punct -	☐ Sig. Damage	% Crumbling -
☐ Damaged	% Delaminating -	☐ Damaged	% Crushed -	☑ Damaged	% Delaminating -
☐ Good Cond.	% H_2O/Gouges -	☐ Good Cond.	% H_2O Stains -	☐ Good Cond.	% H_2O/Gouges-

Contact Potential	☐ High	☐ Moderate	☑ Low
Vibration Potential	☐ High	☐ Moderate	☑ Low
Air Erosion	☐ High	☐ Moderate	☑ Low
OVERALL POTENTIAL RATING	☐ Significant Damage	☐ Damage	☐ Minimal Damage

Sampled By: D. Lewis / E. Nariu

DOH Cert No:

Delivered to Lab By:

Relinquished By/Date/Time: 12/16/25

Received By/Date/Time: Haley Leavitt

Relinquished By/Date/Time:

Received By/Date/Time: 12-16-25 A10:15 RCVD

Samples picked up at EQI office by Hawaii Analytical Laboratory

TURNAROUND TIME: ☐ < 12 Hours ☐ 24 Hours ☑ 3 Days ☐ 5 Days ☐ _____

Surfacing	<1,000 ft² = 3 Samples	1,000 – 5,000 ft² = 5 Samples	>5,000 ft² = 7 Samples
TSI	Minimum of 3 Samples (Run) UNLESS	<6 In. or ft² = 1 Sample	Minimum of 3 Samples (Elbow & 'T')
Misc.	Minimum of 3 Samples (*Hawaii*)		

Surfacing	Sig. Damage = > *10% Dist. or 25% Local*	Damaged = < *10% Dist. or 25% Local*	*Good = Very Limited Damage*
TSI	Sig. Damage = *10% Missing Jacket OR > 10% Dist. or 25% Local*	Damaged = < *10% Missing Jacket OR < 10% Dist. or 25% Local*	Good = *Very Limited Damage*
Misc	Sig. Damage = > *10% Dist. or 25% Local*	Damaged = < *10% Dist. or 25% Local*	*Good = Very Limited Damage*

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8-10-4-201 Sagamiono, Minami-ku, Sagamihara-shi, Kanagawa-ken 252-0303 Phone: (042) 851-5675

EnviroQuest

202511120

PLM DATA SHEET

Project No.: 11 Project Name: " Date: 12/13/25

Page: 2 of 2

Material Description: drywall

Friable / Non-friable

Sample No.	Location	% Asb.	Asb. Type
304749-03A	#110, wall		202583315
03B	" "		202583316
03C	" "		202583317
03D	" "		202583318
03E	" "		202583319

CONDITION: % Damaged: % Localized: % Distributed: Total Material Quantity:

Surfacing Material	TSI	Misc.
☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Crumbling - % Delaminating - % H_2O/Gouges -	☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Gouge/Punct - % Crushed - % H_2O Stains -	☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Crumbling - % Delaminating - % H_2O/Gouges-

Contact Potential	☐ High	☐ Moderate	☑ Low
Vibration Potential	☐ High	☐ Moderate	☐ Low
Air Erosion	☐ High	☐ Moderate	☐ Low
OVERALL POTENTIAL RATING	☐ Significant Damage	☐ Damage	☐ Minimal Damage

Material Description: gray couchbase/tan mastic

Friable / Non-friable

Sample No.	Location	% Asb.	Asb. Type
304749-04A	#110, L-shaped counter, base		202583320
04B	" " " "		202583321
04C	" " " " "		202583322

CONDITION: % Damaged: % Localized: % Distributed: Total Material Quantity:

Surfacing Material	TSI	Misc.
☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Crumbling - % Delaminating - % H_2O/Gouges -	☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Gouge/Punct - % Crushed - % H_2O Stains -	☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Crumbling - % Delaminating - % H_2O/Gouges-

Contact Potential	☐ High	☐ Moderate	☑ Low
Vibration Potential	☐ High	☐ Moderate	☑ Low
Air Erosion	☐ High	☐ Moderate	☑ Low
OVERALL POTENTIAL RATING	☐ Significant Damage	☐ Damage	☐ Minimal Damage

Material Description: tan mastic

Friable / Non-friable

Sample No.	Location	% Asb.	Asb. Type
304749-05A	#110, carpet underside		202583323
05B	" " "		202583324
05C	" " "		202583325

CONDITION: % Damaged: % Localized: % Distributed: Total Material Quantity:

Surfacing Material	TSI	Misc.
☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Crumbling - % Delaminating - % H_2O/Gouges -	☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Gouge/Punct - % Crushed - % H_2O Stains -	☐ Sig. Damage ☐ Damaged ☐ Good Cond.	% Crumbling - % Delaminating - % H_2O/Gouges-

Contact Potential	☐ High	☐ Moderate	☑ Low
Vibration Potential	☐ High	☐ Moderate	☑ Low
Air Erosion	☐ High	☐ Moderate	☑ Low
OVERALL POTENTIAL RATING	☐ Significant Damage	☐ Damage	☐ Minimal Damage

98-029 HEKAHA STREET, SUITE 21 AIEA, HAWAII 96701 PHONE: (808) 486-5881
6-15-17 KAMITSURUMA, MINAMI-KU, SAGAMIHARA-SHI, KANAGAWA-KEN 252-0302 PHONE: (042) 851-5675

Samples picked up at EQI office
by Hawaii Analytical Laboratory

EnviroQuest

APPENDIX C

LEAD
LABORATORY ANALYTICAL REPORT

Hawaii Analytical Laboratory
ANALYTICAL REPORT

Thursday, December 18, 2025

EnviroQuest, Inc.
98-029 Hekaha Street, Suite 21
Aiea HI 96701

Phone Number: (808)486-5881
Email: eqi@enviroquestinc.com

Lab Job No: 202511119
Total Analyzed: 5
Date Collected: 12/15/2025
Date Submitted: 12/16/2025
Project Name: 304749, DLNR ASO Office

Total Lead (paint chips)

NIOSH Method: 7082m LEAD by FAAS

Lab Sple No.	Sample ID / Description	Results	Units	Date Analyzed
202583304	304749-01P	< 0.004	wt %	12/16/2025
202583305	304749-02P	< 0.004	wt %	12/16/2025
202583306	304749-03P	< 0.004	wt %	12/16/2025
202583307	304749-04P	< 0.012	wt %	12/16/2025
202583308	304749-05P	0.0087	wt %	12/16/2025

All Quality Control data are acceptable unless otherwise noted.

EnviroQuest, Inc.
98-029 Hekaha Street, Suite 21
Aiea HI 96701

Phone Number: (808)486-5881
Email: eqi@enviroquestinc.com

Lab Job No: 202511119
Total Analyzed: 5
Date Collected: 12/15/2025
Date Submitted: 12/16/2025
Project Name: 304749, DLNR ASO Office

General Comments
The sample[s] analysis subject of this analytical report were conducted in general accordance with the procedures associated with the "analytical method" referenced above. The analysis of sample relates only to the sample analyzed, and may or may not be representative of the original source of the material submitted for our analysis. All analysts participate in interlaboratory quality control testing to continuously document profiency. This report is not to be duplicated except in full without the expressed written permission of Hawaii Analytical Laboratory. This report should not be construed as an endorsement for a product or a service by the AIHA LAP, LLC or any affiliated organizations. Sample and associated sampling / collection data (e.g. air volume or surface area) is reported as provided by client. TWA values have been calculated based on information supplied by the client that the laboratory has not independently verified. Results have not been corrected for blank determinations unless noted in remarks. Unless otherwise indicated the sample condition at the time of receipt was acceptable. Measurement of uncertainty for lead in paint, dust, airborne particulates, and soil taken from and around buildings and related structures is available upon request. MRL for lead air is 5ug; MRL for lead wipe is 5ug; MRL for lead paint or soil is 40 mg/kg for a 0.25g

Results and Symbols Definitions
> This testing result is greater than the numerical value listed.
< This testing result is less than the numerical value listed.
# = Analytical methods marked with an "#" are not within our AIHA LAP, LLC Scope of Accreditation.
MRL = Method Reporting Limit

Jennifer Hsu Liao
Laboratory Manager

EnviroQuest

202511119

Pb SAMPLE FORM

PROJECT NAME: DLNR ASO office 110/111

LOCATION:

PAGE: 1

DATE: 12/15/25

PROJECT NO.: 304149

TURNAROUND TIME		MEDIA		COMMENTS
☐ <12 HRS	☑ 3 DAYS	☐ BULK	☐ WIPE	total Pb
☐ 24 HRS	☐ OTHER	☐ SOIL	☐ OTHER	

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION	
304149-01P					off white CMU wall				202583301
02P					off-white concrete wall				202583305
03P					off-white dry wall				202583306
04P					off white counter EOP				202583307
05P					brown counter EOP wall				202583308

SAMPLED BY	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
ENI PL		12/16/25	Haley Leavitt	12-16-25A 10:16 RCVD

SUBSTRATE: B = BRICK; C = CONCRETE; D = DRYWALL; M = METAL; P = PLASTER; W = WOOD
CONDITION: INTACT; PEELING, CHIPPING, CHALKING, FLAKING, OR DETERIORATED PAINT

Samples picked up at EQI office by Hawaii Analytical Laboratory

98-029 HEKAHA STREET, SUITE 21 AIEA, HAWAII 96701 PHONE: (808) 486-5881
6-5-17 KAMITSURUMA, MINAMI-KU, SAGAMIHARA-SHI, KANAGAWA-KEN 252-0302 PHONE: (042) 851-5675

EnviroQuest

APPENDIX D

PCBs

LABORATORY ANALYTICAL REPORT

Hawaii Analytical Laboratory
ANALYTICAL REPORT

Monday, December 22, 2025

EnviroQuest, Inc.
98-029 Hekaha Street, Suite 21
Aiea HI 96701

Phone Number: (808)486-5881
Email: eqi@enviroquestinc.com

Lab Job No: 202511135
Total Analyzed: 1
Date Collected: 12/15/2025
Date Submitted: 12/16/2025
Project Name: 304749, DLNR ASO Office

PCBs in Bulk (7 Aroclor)

EPA Method: 3550Cm/3665Am/8082Am [Gas Chromatography - ECD]

Lab Sple No.	Sample ID / Description	Results	Units	Date Analyzed
202583391	**304749-01PCB**			12/17/2025
	Aroclor 1016	< 0.92 mg/kg		
	Aroclor 1221	< 0.92 mg/kg		
	Aroclor 1232	< 0.92 mg/kg		
	Aroclor 1242	< 0.92 mg/kg		
	Aroclor 1248	< 0.92 mg/kg		
	Aroclor 1254	< 0.92 mg/kg		
	Aroclor 1260	< 0.92 mg/kg		
	Total Aroclors	< 0.92 mg/kg		
	Results are reported on a dry weight basis.			

All Quality Control data are acceptable unless otherwise noted.

EnviroQuest, Inc.
98-029 Hekaha Street, Suite 21
Aiea HI 96701

Phone Number: (808)486-5881
Email: eqi@enviroquestinc.com

Lab Job No: 202511135
Total Analyzed: 1
Date Collected: 12/15/2025
Date Submitted: 12/16/2025
Project Name: 304749, DLNR ASO Office

General Comments
The sample[s] analysis subject of this analytical report were conducted in general accordance with the procedures associated with the "analytical method" referenced above. The analysis of sample relates only to the sample analyzed, and may or may not be representative of the original source of the material submitted for our analysis. All analysts participate in interlaboratory quality control testing to continuously document profiency. This report is not to be duplicated except in full without the expressed written permission of Hawaii Analytical Laboratory. This report should not be construed as an endorsement for a product or a service by the AIHA LAP, LLC or any affiliated organizations. Sample and associated sampling / collection data (e.g. air volume or surface area) is reported as provided by client. TWA values have been calculated based on information supplied by the client that the laboratory has not independently verified. Results have not been corrected for blank determinations unless noted in remarks. Unless otherwise indicated the sample condition at the time of receipt was acceptable. Measurement of uncertainty for lead in paint, dust, airborne particulates, and soil taken from and around buildings and related structures is available upon request. MRL for lead air is 5ug; MRL for lead wipe is 5ug; MRL for lead paint or soil is 40 mg/kg for a 0.25g

Results and Symbols Definitions
> This testing result is greater than the numerical value listed.
< This testing result is less than the numerical value listed.
# = Analytical methods marked with an "#" are not within our AIHA LAP, LLC Scope of Accreditation.
MRL = Method Reporting Limit

Eva Skogsberg
Laboratory Manager

EnviroQuest

202511135

Pb SAMPLE FORM

PROJECT NAME: DLNR ASO offile

LOCATION: 110/111

PAGE: 1

DATE: 12/13/23

PROJECT NO.: 304749

TURNAROUND TIME		MEDIA		COMMENTS
☐ <12 HRS	☐ 3 DAYS	☐ BULK	☐ WIPE	total PCBs
☐ 24 HRS	☑ OTHER 5 days	☐ SOIL	☐ OTHER	

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION
304749-01PCB								
	Black floor				mastic	202583391		

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION

SAMPLE NO	INT	EXT	FLR	ROOM	COMPONENT	SUBSTRATE	COLOR	CONDITION

SAMPLED BY	RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
EN	[signature]	12/16/25	Haley Leavitt [signature]	12-16-25A10:17 RCVD

SUBSTRATE: B = BRICK; C = CONCRETE; D = DRYWALL; M = METAL; P = PLASTER; W = WOOD
CONDITION: INTACT; PEELING, CHIPPING, CHALKING, FLAKING, OR DETERIORATED PAINT

Samples picked up at EQI office
by Hawaii Analytical Laboratory

98-029 HEKAHA STREET, SUITE 21 AIEA, HAWAII 96701 PHONE: (808) 486-5881
[illegible] MITSUBISHI MINAMI-KU, SAGAMIHARA-SHI, KANAGAWA-KEN 252-0302 PHONE: (042) 851-5675

DIVISION 2 - SITEWORK

SECTION 02070

SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS
As specified in Section 01019 - GENERAL SPECIFICATIONS, Special Provisions, and the General Conditions of the Contract.

1.2 DESCRIPTION OF WORK
Accomplish all demolition, removal, patching and related work indicated on or required by the drawings, and as specified herein.

1.3 GENERAL REQUIREMENTS

A. The Contractor shall visit the project site, examine the premises and note all existing conditions and the extent involved for the complete and proper execution of all work as called for on the plans and as hereinafter specified.

B. Obvious conditions which exist on the site shall be accepted as part of the work, even though they may not be clearly indicated on the Drawings and/or described herein, or may vary there from.

C. All debris of any kind accumulated from the work of this Section shall be disposed off the site.

D. Permits, Notice, Etc. The Contractor shall serve proper notice and consult with the State regarding any temporary disconnections of electrical or other utility lines in the area which may interfere with the removal work, and all such lines where necessary shall be properly disconnected or relocated before commencing with the work.

E. Protection: Throughout the work, protection shall be provided for walks, property, etc., scheduled to remain. Safe working conditions shall be maintained at all times for all personnel, and temporary lights and barricades shall be provided and maintained.

1.4 JOB CONDITIONS

A. Utility Services: The existence of utility lines other than those shown on the drawings is not definitely known. Should any utility lines be encountered, the Contractor shall immediately notify the State and follow his direction as to procedure. Maintain existing utilities indicated to remain, keep in service, and protect against damage during demolition operations. Do not interrupt existing utilities serving occupied building or facilities, except when authorized in writing by the State.

B. Outages and interruptions must be approved in advance by the State. Submit written notice of outages and interruptions not less than fifteen days in advance of intended outage. Report damage, immediately. Do not repair or reconstruct any pipe, conduit, or installation without authorization, except perform emergency repairs immediately.

PART 2: PRODUCTS

2.1 MATERIALS

Asbestos Prohibition: No asbestos containing materials or equipment shall be used under this section. The Contractor shall ensure that all materials and equipment incorporated in the project are asbestos-free.

PART 3: EXECUTION

3.1 EXECUTION OF WORK

A. Water and sewer facilities shall be available and in operating condition at all times.

B. Demolish and remove existing piping and other obstructions or encumbrances of any kind or character within the Contract Zone Limits, with the exception of any structures to remain and any active water, drainage, electrical, lines, boxes, etc., unless otherwise directed by the State.

C. Abandoned utility lines shall be removed.

D. Every precaution must be taken at all times for the protection and safety of students, faculty, and the public.

3.2 BARRICADE

Erect temporary barricades as required, to prevent people from entering into project area to the extent as approved by the State. The extent of barricade may be adjusted as necessary with the approval of the State. This work shall be accomplished at no extra cost to the State.

3.3 CONTRACT ZONE LIMITS

The Contract Zone Limits shall generally be as indicated on the plan; however, work outside the Zone Limits necessary to complete the project shall be included.

3.4 MAINTAINING LIFE SAFETY SYSTEMS

The Contractor shall maintain the existing life safety systems in proper operation, such as fire alarm systems, exits, lighting, and other necessary aspects of life safety.

3.5 DISPOSAL OF DEMOLISHED MATERIALS

Remove debris, rubbish, and other materials resulting from demolition operations from building site daily. Transport and legally dispose of materials off site.

A. If additional hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution.

B. Burning of removed materials is not permitted on project site.

3.6 CLEAN UP

Debris and rubbish shall be removed from the site daily. Debris and rubbish shall not be allowed to accumulate on site. Debris shall be removed and transported in a manner that will prevent spillage on streets or adjacent areas.

3.7 DEMOLITION OPERATIONS – SALVAGEABLE WORK:

A. Salvageable for the Owner: Bubble wrap, tape, and place each product and each product related materials into heavy duty carb board boxes that can effectively fit each boxed product. Label each box with contents. Label each furniture item, protecting all following but not limited to corner panels, operable components, finish surfaces, electronic equipment, and attachments. Label to indicate general product type, Manufacturer, Model No., at minimum . Other packing methods and labeling when acceptable to the Engineer.

B. Carefully relocate furnitures as indicated on Drawings to indicated temporary storage area, delineating the area with cones, taped-off by Contractor at all times, until furnitures are moved back to original locations or designated location on Drawings. Protect all furnitures throughout the duration of the scope of work from damage and theft.

C. For Reinstallation in the Project:

1. Remove work, relocate, and reinstall all related components without damage.

2. Store and protect from damage and deterioration, until required for reinstallation.

3. Prior to reinstallation, perform the following, unless otherwise indicated in the Report submitted and successfully reviewed and accepted by the Engineer.

a. Fully clean and polish each stored item.

b. Replace damaged and deteriorated components caused by Contractor.

c. If any touchup painting or total repaint required, such painting to match the original “like-new” paint coating.

d. Reinstall each stored item to provide a fully functioning product.

3.8 MATERIAL STORAGE:

A. Removed items to be re-installed by the Contractor shall be stored in a secured locations as indicated on Drawings. The Contractor shall be responsible for all items and shall replace any missing or damaged items at his own expense.

END OF SECTION

DIVISION 9 - FINISHES

SECTION 09680

CARPET

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

As specified in Section 01019 - GENERAL SPECIFICATIONS, Special Provisions, and the General Conditions of the Contract.

1.2 DESCRIPTION OF WORK

A. Provide all carpet as indicated on the drawings and specifies herein including the following:

1. Carpet tile.

2. Resilient base.

3. Installation Accessories.

1.3 SUBMITTALS

A. Submit in accordance with SECTION 01300 - SUBMITTALS

B. Product Data - Submit for project records only: For each type of product indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance. Include installation methods.

C. Shop Drawings: Submit shop drawings including plans and details showing the following:

1. Columns, doorways, walls or partitions, built-in cabinets, etc.

2. Type of subfloor.

3. Type of installation.

4. Type, color, and location of edge, transitions, and other accessory strips.

5. Transition details to other flooring materials.

D. Samples: Submit samples for each carpet(s) products proposed for use and each color and texture required. Label each sample with manufacturer’s name, material description, color, pattern, and designation indicated on Drawings.

1. Carpet tile: Full-size sample.

2. Exposed Edge and Transition stripping and Accessory: Twelve-inch long samples.

3. Resilient Base: Twelve-inch long samples.

E. Maintenance Data - Submit for project records only: Include methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule, and precautions for cleaning materials and methods that could be detrimental to carpet.

F. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with lables describing contents.

1. Carpet Tile: Full-size units equal to 15 percent of amount installed for each type indicated, but not less than 10 sq. yd.

G. Substitutions: Comply with the General Conditions provisions, except that Contractors will not be required to "pre-approve" their products before bid, but can furnish other manufacturers' products that are comparable in quality to named products in paragraph entitled "ACCEPTABLE PRODUCTS AND MANUFACTURERS" hereinbelow.

H. Certificate: Submit certificate stating that the concrete slab was tested for moisture and alkalinity and that the flooring manufacturer’s requirements have been met.

I. Warranty: Submit written warranty as specified in paragraph entitled "WARRANTY" hereinbelow.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who can demonstrate compliance with the Floor Covering Installation Board's certification program requirements.

B. Product Options: Products and manufacturers named in Part 2 establish requirements for product quality in terms of appearance, construction, and performance. Other manufacturers' products comparable in quality to named products and complying with requirements may be considered.

C. Fire-Test-Response Characteristics: Provide products with the critical radiant flux classification as determined by testing identical products per ASTM E 648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

D. Indoor Air Quality (IAQ): Comply with the Carpet and Rug Institute's CRI test program ASTM D 5116. Include lAC Certification and label for carpet and installation adhesives.

E. ADA Compliance: Meet ADA requirements for carpets, heights, changes in level and other items.

F. Recycled Materials: CRI Green Label for recycling.

1.5 DELIVERY, STORAGE, AND HANDLING

Comply with Carpet and Rug Institutes CRI 104, Section 5, "Storage and Handling".

1.6 PROJECT CONDITIONS

A. General: Comply with CRI 104, Section 7, "Site Conditions; Temperature and Humidity".

B. Environmental Limitations: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

C. Surface Condition: Install carpet tiles over existing flooring that has not been moisture tested, however sufficienty dry substrate to bond with adhesive is recommended by carpet manufacturer.

D. Where items are indicated for installation on top of carpet tiles, install carpet tiles before installing these items.

1.7 WARRANTY

A. Contractor's Warranty: Submit written warranty from the Carpet laying Contractor and countersigned by the Contractor, covering all materials and workmanship for a period of one year from the project acceptance date. The warranty shall cover the correction by the Contractor of any defects in materials or workmanship which occur during the period of warranty by the repairing or replacing with new material at his own expense.

B. Manufacturer's Warranty: Submit written 15 year non-pro-rated warranty, signed by carpet manufacturer agreeing to replace carpet that does not comply with requirements or that fails within specified warranty period. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, resiliency loss, and delamination. The Surety shall not be held liable beyond 2 years from the project acceptance date.

PART 2 - PRODUCTS

2.1 ACCEPTABLE PRODUCTS AND MANUFACTURERS

Provide products of manufacturer listed hereinbelow or approved equal products of Shaw, Mohawk Industries, Masland, or Lees Carpets:

2.2 CARPET MATERIALS

A. Carpet Tile Basis of Design: Intended to match existing

1. Product: Shaw Contract Chalet Ecologix Carpet Tile

2. Style: 5T232
3. Color: Glacier 19550
4. Fiber Content: EcoSolution Q100 Nylon
5. Surface Texture: Textured Patterned Loop
6. Gauge: 1/10 inch
7. Tufted Pile Weight: 18.0 oz. per sq. yd.
8. Construction: Multi-Level Pattern Cut/Loop
9. Finished Pile Thickness: 0.371 ”
10. Stitches Per Inch: 10.5 per inch
11. Dye Method: 100% Solution Dyed
12. Density: 6113 oz per cu. yard
13. Primary Backing: Synthetic
14. Secondary Backing: Ecologix Tile
15. Size: 9”x 36”
16. Installation: Glue Down.

B. Performance Requirements:

1. Flammability Radiant Panel Test: NFPA Class 1, per ASTM E 648.

2. NBS Smoke: Less than 450 Flaming Mode per NFPA 258, ASTM E 662.

3. Static: 3.5 kv maximum not to exceed per American Association of Textile Chemist and Colorists (AATCC) AATCC-134 Step method.

4. Noise Reduction Coefficient (NRC): Standard with the Manufacturer per ASTM C 423.

5. Antimicrobial Activity: Not less than 2-mm halo of inhibition for gram-positive bacteria; not less than one-mm halo of inhibition for gram-negative bacteria; no fungal growth; per AATCC-174.

6. Resistance to Insects: Comply with AATCC-24.

7. Colorfastness to Crocking: Not less than 4, wet and dry, per AATCC-165.

8. Colorfastness to Light: Not less than 4 after 40 AFU (AATCC fading units) per AATCC-16.

9. Stain Resistance: Not less than 8, per AATCC-175

2.3 INSTALLATION ACCESSORIES

A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided by or recommended by carpet manufacturer.

B. Adhesives: Carpet Manufacturer's pressure sensitive, non solvent based, water resistant, mildew-resistant, non-staining type to suit products and subfloor conditions that complies with flammability requirements for installed carpet.

C. Metal Edge Strips: Extruded aluminum with mill finish or width shown, of height required to protect exposed edge of carpet, and of maximum lengths to minimize running joints.

D. Edge Guard: Vinyl or rubber type reducer strips and transition strip where shown or required, as manufactured by Johnson Rubber Co., Mercer Plastic Co., Textile Rubber Co., Roppe, or approved equal products.

E. Resilient Base: Resilient base shown shall conform to ASTM F1861 ad shall be rubber,4-inches high, top-set type, 1/8" thick, Style A straight type, with a smooth exposed surface and textured bonding surface on it's unexposed face. The rubber material shall be free from offensive odor and its color shall be uniform throughout the thickness of the base.

F. Base Adhesive: Base adhesive shall be acrylic latex water-resistant type, as recommended by the manufacturer for the specific materials used. Do not use adhesive not intended for its purpose.

PART 3- EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Verify that substrates and conditions are satisfactory for carpet installation and do not proceed with installation until conditions have been corrected.

B. Concrete Subfloors: Verify that existing substrate comply with ASTM F 710 and the following:

1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond, moisture and alkalinity tests recommended by carpet manufacturer. Where testing shows the moisture content or alkalinity is not within the floor manufacturer's requirements, provide remedial work, including floor sealing system or other means, to assure compliance with carpet manufacturer.

2. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

Prepare substrates to receive carpets in accordance with CRI 104: Standard for Installation of Commercial Carpet, Section 6.2, "Site Conditions; Floor Preparation", and carpet manufacturer's written installation instructions for preparing substrates indicated to receive carpet installation. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.

3.3 INSTALLATION

A. Layout:

1. Comply with carpet manufacturer's written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.

2. Lay adjoining sections in the same direction whenever possible.

3. Follow location of seams when noted on the drawings.

B. Direct-Glue-Down Installation: Comply with CRI 104, Section 8, "Direct Glue- Down Installation".

C. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.

D. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

E. Unless otherwise noted, install pattern parallel to walls and borders.

F. Installation of base shall be after installation of carpet.

G. Resilient Base: Resilient base shall be applied onto thoroughly dried wall with adhesive recommended by manufacturer. Base shall be continuous around corners, 12-inch minimum from corners.

3.5 MODULAR WALK-OFF CARPET TILE

A. Provide as scheduled.

B. Direct-Glue-Down Installation: Comply with CRI 104, Section 8, "Direct Glue- Down Installation".

G. Provide Metal Edge Transition Strip: At modular walk-off carpet tile and Carpet tile transition, Extruded aluminum with mill finish or width shown, of height required to protect exposed edge of carpet, and of maximum lengths to minimize running joints.

3.6 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing carpet:

1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.

2. Remove yarns that protrude from carpet surface.

3. Vacuum carpet using commercial machine with face-beater element.

4. Protect installed carpet to comply with CRI 104, Section 15, "Protection of Indoor Installations".

5. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer.

END OF SECTION

SECTION 09902

REPAINTING

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

As specified in Section 01019 - GENERAL SPECIFICATIONS, Special Provisions, and the General Conditions of the Contract.

1.2 SUMMARY

A. Surface preparation and field application of paints and coatings to new and existing surfaces. Areas (Surfaces) to be Painted:

1. Interior Surfaces to be Painted: All existing interior painted surfaces and new surfaces shall be painted unless otherwise indicated on the plans and/or specifically deleted in these specifications. Interior surfaces to be painted shall be those surfaces not expose to weather in an area enclosed by 4 walls, including enclosed Lanais.

   Also, a surface shall be considered an interior surface and painted as such whenever the color is that of the existing interior color. Extent of treatment for special items is as follows:

   a. All interior surfaces, walls, ceiling, trims, frames, etc.

   b. Interior surfaces shall not be treated unless specifically noted otherwise.

   c. Gypsum board walls and partitions.

   d. Interior wall bases following existing wall base removal.

   e. PVC pipes, G.l. Pipes and conduits, and similar appurtenances.

   f. Stain wood to match existing adjacent finish where indicated or required.

2. Surfaces Not to be Painted:

   a. Metal surfaces of anodized aluminum, copper and similar finished metal surfaces shall not require painting unless previously painted or otherwise scheduled.

   b. Factory/Pre-finished Items: When factory finishing or installer-finishing is specified, such items shall not require painting unless otherwise scheduled.

c. Labels: Do not paint over any code-required labels, such as Underwriters' Laboratories, or any equipment identification, performance rating, name, or nomenclature plates.

d. Data equipment cable connection.

3. "Paint" as used herein means all coating system materials, including primers, enamels, sealers, stains, varnish, and fillers, and other applied materials whether used as prime, intermediate or finish coats, except as specifically noted herein.

4. All painting work shall be done after business hours or during the weekend.

1.3 RELATED SECTIONS

A. Division 13, skim-coating and painting of existing wallbase and hazardous material removal.

B. Divisions 16, identification marking or painting of electrical equipment and apparatus.

1.4 REFERENCES

A. ASTM D 16 - Definition of terms relating to Paint, Varnish, Lacquer and Related Products.

B. ASTM D 2016- Test Method for Moisture Content of Wood.

C. PCA (Portland Cement Association) - Painting Concrete.

D. PCDA (Painting and Decorating Contractors of America - Painting –Architectural Specification Manual.

E. SSPC (Steel Structures Painting Council) - Steel Structures Painting Manual.

1.5 DEFINITIONS

A. Conform to ASTM D 16 for interpretation of terms used in this section.

1.6 SUBMITTALS

A. Submit in accordance with SECTION 01300 - SUBMITTALS.

B. Product Data:

1. Materials List: Provide an inclusive list of required patching and coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.

a. For products with premixed colors, provide manufacturer's standard color chips for selection by Engineer.

2. Manufacturer's Information: Provide data on all listed materials, including:

a. Thinning and mixing instructions.

b. Application instructions and required mil film thicknesses.

c. Manufacturer's Material Safety Data Sheets.

C. Certifications: Provide a letter certifying paints and coatings are free of asbestos, lead, zinc-chromate, strontium chromate, cadmium, mercury, crystalline silica (except for chalkboard resurfacing paint) and other EPA regulated and hazard materials. Provide a letter certifying the amounts of mildewcide added by both the paint manufacturer and paint supplier.

D. Schedule of Finishes: Provide finish schedule including paint spread rates required to achieve final dry film thickness indicated in the schedule.

E. Schedule of Operations: Provide a work schedule showing sequence of operation and installation dates.

F. Samples:

1. Submit color and finish samples, at manufacturers normal paint chip size illustrating range of colors and textures available for each surface finishing product scheduled.

2. After color and finish sample are returned, submit paint finish samples, 8.5- inches x 11-inches in size illustrating selected colors and textures for each selection. Divide sample in horizontal strips showing prime and overlapping second and finish coats. Show coat tinting. Prepare transparent finish samples on same material as that on which coating will be applied. Identify each sample.

G. Manufacturer's Instructions: Indicate special surface preparation procedures, and substrate conditions requiring special attention. Refer to paragraph entitled "EXAMINATION" hereinbelow.

H. Provide a Comprehensive Spray Plan when airless spraying is proposed.

I. Qualification Data: For Applicator.

J. Delivery Receipts: Provide 3 copies of the delivery receipt, signed by the user's representative, attesting to delivery of extra paint as required under paragraph entitled "EXTRA MATERIAL" hereinbelow.

K. Guaranty: Submit written guaranty as specified in paragraph entitled "GUARANTY" hereinbelow.

1.7 REGULATORY REQUIREMENTS

A. Comply with State OSHL (Occupancy Safety and Health Law) and pollution controls regulations of the State Department of Health and EPA.

1.8 QUALITY ASSURANCE

A. Applicator Qualifications: A firm or individual experienced in applying paints and coatings similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.

B. Source Limitations: Obtain block fillers and primers for each coating system from the same manufacturer as the finish coats.

1. Exception: Alkali resistant primers if compatible with the intermediate coat paint products.

C. Field Samples (Mockups): Provide a full-coat field sample panel for each type of coating and substrate scheduled in Part 3. Comply with procedures specified in PDCA P5. Duplicate finish of approved sample Submittals.

1. Engineer will select one room or surface to represent surfaces and conditions for application of each type of coating and substrate.

a. Wall Surfaces: Provide samples at least 4-feet long by 8-feet high unless indicated otherwise on drawings.

b. Small Areas and Items: Engineer will designate items or areas required.

2. Apply benchmark samples, according to requirements for the completed Work. Provide temporary lighting levels similar to permanent lighting conditions for Engineer's evaluation.

a. After finishes are accepted, Engineer will use the room or surface to evaluate coating systems of a similar nature.

D. Comprehensive Spray Plan for Airless Spraying: Where airless spraying is proposed, provide a comprehensive spray plan to include:

1. Documentation that the individual spray applicator(s) on the project have completed an approved spray applicator certification program conducted by the Painting Industry of Hawaii. The certification program shall include material and equipment selection, use and maintenance, hands-on application and safety training.

2. Proposed overspray protection methods.

3. Paint Manufacturer's spray application instructions and recommendations for products to be used.

4. Proposed schedule to shut-down or covering existing air-conditioning and ventilation equipment and existing air intake, return and diffuser grilles.

E. In addition, the Engineer shall have the right to require the immediate removal of any paint applicator who demonstrates negligence, lack of competence or repeated non-compliance with the contract requirements.

1.9 DELIVERY STORAGE AND HANDLING

A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label and the following information:

1. Product name or title of material.

2. Product description (generic classification or binder type).

3. Manufacturer's brand name and lot number and date of manufacture.

4. Contents by volume, for pigment and vehicle constituents.

5. Thinning instructions.

6. Application instructions and coverage.

7. Color name and number.

8. VOC content.

B. Storage:

1. Non-flammable Materials: Store materials not in use in tightly covered containers in a well-ventilated area. Maintain storage containers in a clean condition, free of foreign materials.

2. Flammable Materials: Store in such a manner as to prevent damage. No paint material, empty cans, paint brushes and rollers may be stored in the building(s). Store these items in separate storage facilities away from the building(s). Contractor may furnish a separate job site storage structure, if the structure complies with the requirements of the local Fire Department. Keep the storage area shall clean. Lock any storage structures when not in use or when no visual supervision is possible.

C. All rejected materials shall be removed from the job site immediately.

1.10 PROJECT CONDITIONS

A. Do not apply materials when surfaces and ambient temperatures are outside the ranges required by the paint product manufacturer. Do not apply exterior coatings during rain or when relative humidity is outside the humidity ranges required by the paint product manufacturer.

B. Protect public, pedestrians and tenants from injury. Provided, erect and maintain safety barricades around scaffolds, hoists and where construction operations create hazardous conditions.

C. Completed Work: Provide necessary protection for wet paint surfaces.

D. Protective Covering and Enclosures: Provide and install clean sanitary drop cloth or plastic sheets to protect furniture, equipment, floor and other areas that are not scheduled for treatment. Remove any paint applied to surfaces not scheduled for treatment.

E. Fire Safety: Contractor and its employees shall not to smoke in the vicinity of the paint storage area. Exercise precautions against fire at all times and remove waste rags, plastic (polyester sheets), empty cans, and other similar items from the site at the end of each day.

F. Where airless spraying is used, ensure that protective enclosures are erected to prevent the escape of overspray from the work area.

G. Safeguarding Property: Safeguard the work and also the property of the State and other individuals in the vicinity of Contractor's work. Make good on any damages and for losses to work or property caused by Contractor or its employee's negligence. Where damaged property cannot be cleaned and restored to its original condition (i.e. prior to being damaged) replace it with a new product of equal quality. No proration or use of "used" products will be permitted.

1. For painting and spray painting operation, assume that cars will not be temporarily relocated from parking areas during the painting operations.

2. Paint overspray shall not carry more than 5 lineal feet beyond the building eave line nor within 10 lineal feet of pedestrians or property and surfaces not scheduled to be painted. Immediately cease spray painting when overspray carries beyond these specified limits. Do not continue until protective barriers are erected to properly contain the overspray and damages caused by the overspray have been corrected.

3. The Contractor shall be assessed $1,000.00 for each incidence of property or personal damage caused by overspray until such time that a satisfactory settlement has been agreed upon by the damaged party and corrective action has been completed. All corrective action shall be settled within 24 hours from the time the damage is discovered. Should the Contractor fail to take corrective action in a timely and expeditious manner,

the Engineer shall contact the Contractor's Insurance company to seek resolution on the matter.

H. Other Incidental Work to be Performed by Contractor:

1. Unless otherwise specified, the Contractor is responsible for moving about all furniture and equipment to provide himself with sufficient working space.

   The Contractor shall protect these items and make good any damage to them at no cost to the State. After the painting of the room is completed, the Contractor shall replace all furniture and equipment to their original locations.

2. The Contractor shall carefully remove and neatly store away or properly protect in-place curtains, blinds and miscellaneous items. Removed items shall be reinstalled at the completion of the work.

3. All items on shelving and in cabinets to be painted will be removed by the user personnel prior to painting work.

I. Trim back shrubbery and plants shall 6-inches from surfaces to be painted.

J. Areas inaccessible to Normal Painting: The Contractor shall remove and reinstall in order to paint complete.

K. Remove all existing signages and reinstall after completion of painting.

1.11 COMPATIBILITY OF PAINTING SYSTEMS AND SUBSTRATES

A. The Contractor shall ensure that painting systems specified are compatible with existing painted surfaces. Alkyd paints shall not be applied over existing latex coating. Alkyd paints shall not be used over cementitious surfaces. Latex paints shall not be applied directly over alkyd paints without proper conditioner and approval by the Engineer.

B. Field Tests for Alkyd or Latex Paints: The Contractor shall perform the following field tests for compatibility of substrates to new paint systems prior to ordering paint:

1. Latex films will dissolve when wiped with rubbing alcohol; alkyd films will not.

2. When sanded, latex films will "clog" sandpaper; alkyd films will sand clean.

3. Alkyds will soften after applying a 10 percent solution of Drano in water; latex films will not soften.

4. Alkyds will burn when exposed to a flame; latex film will not burn.

5. Paints which do not respond to 2 or more of these tests are probably epoxy, urethane, or other type of coating.

6. Provide a packaged swab test in accordance with the package directions.

7. Existing paint identified or suspect of having lead-containing paint shall be tested in a manner that does not produce airborne or uncontrolled lead debris.

C. Should there by any discrepancies between the specified Schedule of Finishes and the existing paint systems, the Contractor shall notify the Engineer in writing of any incompatible systems specified and submit a revised Schedule of Finishes for approval when necessary. With the approval of the revised Schedule of Finishes, the Contractor shall make any corrections and/or revisions necessary to resolve the discrepancies and/or inconsistencies. The Contractor shall not proceed with any painting systems that are incompatible, although specified otherwise, until all incompatible conditions detrimental for the proper application and performance of the painting systems have been corrected. The failures due to the application of the incompatible paint systems shall be corrected at no additional cost to the State. Proceeding with the work shall imply acceptance of the specified Schedule of Finishes and the compatibility with the existing painted surfaces by the Contractor.

1.12 MINIMUM PAINTING WORK

A. Unless noted otherwise, minimum interior painting work area shall be the complete inside surfaces of one room. Minimum exterior painting work area shall be one side of a single story building or one side of one story on multiple story buildings.

1.13 GUARANTY

A. Contractor shall provide a 2 year guaranty that the work performed under this section conforms to the contract requirements and is free of any defect of material or workmanship.

1.14 EXTRA MATERIAL

A. Provide extra paint in each of the different colors, types and surface textures of exterior and interior paint to the user/school upon completion of the project. Paint shall be in unopened one gallon containers and labeled with color, type, texture, room locations, and date in addition to manufacturer's label.

1. Provide 5 gallons of each color for paint used over large areas, such as the building interior office space.
2. Provide one gallon of each color for all other areas.

PART 2- PRODUCTS

2.1 PAINT MATERIALS, GENERAL

A. Material Compatibility: Provide block fillers, patching materials, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under

conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.

1. Proprietary Names: Use of manufacturer's proprietary product names in the color schedule to designate colors or materials, is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer's material data and certificates of performance for proposed products to be used.

C. Colors: As scheduled or as selected by the Engineer. Program Bells shall be painted "Battleship Gray". Fire Bells shall be painted "Fire Engine Red".

D. EPA Regulated and Hazard Materials: Do not use paint or paint products containing asbestos, lead, mercury, zinc chromates, strontium-chromate, cadmium mercury, crystalline silica (except for chalkboard resurfacing paint) or the EPA regulated or hazard materials.

E. Mildew and Water Stains: Provide spot priming of product equal to Bulls Eye Odorless or Cover Stain, as required for existing stains.

F. Interior Paints: Provide low odor solvent free paints, semi-gloss unless scheduled otherwise.

1. Interior Acrylic Semi-Gloss Paint complete with tint bases to color as scheduled or to match existing including dark and specialty colors (not limited to green, blue, red, yellow, and brown), products must meet or exceed the following:

a. Acrylic semi-gloss, interior finish for wood, masonry, metal, plaster, and drywall.

b. Semi-gloss/satin finish: Gloss at 60 degrees 55-70.

c. Resin: 100 percent acrylic.

d. Pigment: Minimum 90 percent titanium dioxide.

e. Viscosity: 90- 100 K.U.

f. Percent Solids by Volume: 34 percent minimum.

g. Weight per Gallon: 10.3 pounds minimum.

h. To be as scheduled, except Sherwin Williams Metalatex Semi-Gloss with accepted deviations of above performance requirements is accepted as an equal.

G. Primers: Provide universal type that is capable of being used over existing alkyd and latex substrates or primers that are specifically compatible with each existing substrate.

1. Typical Primer/Sealer including tinting to match color of finish paint:

   a. Primer, interior/exterior, oil base, all purpose for wood, concrete, clean galvanized metal, aluminum, plaster, drywall, and hardboard.

   b. Undercoat for gloss latex or alkyd enamels.

   c. Able to sand and recoat in one hour.

   d. Virtually VOC free product.

   e. Tinting: Light to mid-tone.

   f. Stain killer.

   g. To be Zinsser Cover Stain, Sherwin Williams PrepRite Quick Seal Y24W980, or equal.

2. Odorless Interior Primer/Sealer including tinting to match color of finish paint.

   a. Primer, interior, oil base, for wood, plaster, drywall, hardboard, paneling, stucco, and metal.

   b. Odorless.

   c. Undercoat for gloss latex or alkyd enamels.

   d. Able to sand and recoat in 2 hours.

   e. Virtually VOC free product.

   f. Tinting: Light to mid-tone.

   g. Stain killer.

   h. To be Zinsser Bulls Eye Odorless, Sherwin Williams PrepRite ProBiock Odorless B49W20, or equal.

H. Paints shall be as manufactured by Ace, Benjamin Moore, Cabot's, Carboline, Dupont, Dutch Boy, Fine Line Paint Corp., ICI Ameritone, ICI Decratrend, ICI Devoe, ICI Dulux, ICI Fuller-O'Brien, ICI Glidden, ICI Sinclair, Martin Senour, Olympic Stain, Pervo, Pittsburg, Porter Inti., Pratt & Lambert, Rust-Oleum, Sherwin-Williams, Smiland (Styletone), Spectra-Tone, Thoro Systems, Tnemec, United Paint and Coatings, Zinsser, or approved equal.

I. Except for metal primers all paint shall contain the maximum amount of mildewcide per gallon of paint permitted by the mildewcide manufacturer without adversely affecting the quality of the paint. Contractor shall pre-mix mildewcide into all interior and exterior paints and primers except as specified otherwise. Mercurial fungicide shall not be used.

2.2 MISCELLANEOUS MATERIALS

A. Provide patching and repair materials. Compatible with paint finishes and substrates. Use weather resistant materials for exterior surfaces and surfaces exposed to moisture.

B. Accessories

1. General: Provide other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.

2. Thinners: Thinning of paint shall be done using material recommended by the manufacturer. Mix proprietary products according to manufacturer's requirements. Do not use compound thinner, mineral oil, kerosene, refined linseed oil, or gasoline for thinning.

PART 3 -EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for paint application. Comply with procedures specified in PDCA P4.

1. Proceed with paint application only after unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.

a. Ensure that concrete and masonry surfaces are cured, are within acceptable alkalinity and dried to meet paint manufacturer's recommendations.

b. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:

1) Plaster and Gypsum Wallboard: 12 percent.

2) Masonry, Concrete and Concrete masonry units: 12 percent.

3) Interior Wood: 15 percent, measured in accordance with ASTM D 2016.

c. Start of painting will be construed as Applicator's acceptance of surfaces and conditions within a particular area.

3.2 COORDINATION OF WORK

A. Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.

B. Notify Engineer about anticipated problems when using the materials specified over substrates primed by others.

3.3 PREPARATION

A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.

B. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.

1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.

1. General: Correct defects and clean surfaces which affect work of this section. Remove existing coatings that exhibit loose surface defects.

a. Provide barrier coats over marks, patches, and other imperfections which may bleed through surface finish.

b. Remove from surfaces to be repainted all foreign matter such as nails, screws, staples, tape and gum.

c. Remove all loose, blistered, scaled, crazed or chalky finish to an existing tight and firm finish.

d. Remove mildew as noted in paragraph entitled "Mildew Removal Preparation" hereinbelow.

e. Spot prime areas where bare wood, concrete, masonry, plaster, fill, seal or patched material is exposed with the specified primer and feather out onto adjacent paint.

f. Remove all loose or cracked caulkings.

2. Wash all surfaces with a solution of tri-sodium phosphate and water or other appropriate solution to remove any accumulated film of wax, oil, grease, smoke, dust, dirt, chalking or other foreign matter which would impair the bond of, or bleed through the new paint finish. After washing, rinse the surface with potable water and allow to thoroughly dry. Rinsing may be performed by high pressure water washing as noted in paragraph entitled "High Pressure Water Washing Preparation" hereinbelow.

    a. Surfaces shall dry a minimum of 24 hours before the application of primers. For wood surfaces drying shall continue until the moisture content of the wood is less than 15 percent. For concrete and concrete masonry surfaces test for alkali and moisture.

3. Lightly sand the surface where existing finish remains tight and firm. Where the paint has been removed, sand the edges of scarred areas to a smooth feathered edge.

4. Fill holes (nail, tack, staple, and other similar items), cracks, open joints and other imperfections with appropriate compound and allow to set (door and trim included). Reseal all joints where loose or cracked caulkings were removed. Seal all openings which will permit the entrance of water. Sealing compounds shall be compatible with the substrate, primer and paint. Apply and allow sealants to set in accordance with the manufacturer's recommendations.

5. Cementitious Materials: Seal all cracks hairline to 1/8-inch in width with concrete patching compound. All cracks over 1/8-inch in width and holes 1/4- inch diameter or greater shall be sealed with a latex modified or epoxy modified reinforced patching system before paint application. All patching shall be done in accordance with the patching manufacturer's recommendations and instructions. All patching shall be done in accordance with the manufacturer's recommendations and instructions. Apply texture, if required, to match existing textured surfaces.

    a. Concrete Floors: Remove contamination, efflorescence, acid etch, neutralize and rinse floors with clean water. Verify required acid-alkalai balance is achieved. Allow to dry.

6. Plaster Surfaces: Scarred plaster areas shall be patched with appropriate plaster materials. Fill holes, cracks, open joints and damaged areas with vinyl base or latex modified patching system. Apply texture, if required, to match existing textured surfaces.

7. Gypsum Board Surfaces: Fill minor defects with filler compound. Spot prime defects after repair.

8. Wood:

    a. Interior: Wipe off dust and grit prior to sealing.

b. Exterior: Wash glu-laminated wood with solvent to remove grease and dirt prior to sealing.

c. Seal knots, pitch streaks, and sappy sections with sealer. Fill fastener holes and cracks after priming has dried; sand between coats.

9. Ferrous and Galvanized Metal Surfaces:

a. Comply with preparation requirements of the Steel Structures Painting Council (SSPC) Standard SP3.

b. Remove rust, loose mill scale and blistering /loose paint by power tool chipping, de-scaling, sanding, wire brushing and grinding down to bare metal. Only tightly adhering surface rust, mill scale and paint which cannot be removed with a dull putty knife may remaining. Do not burnish the surfaces during cleaning.

c. Completely wipe surfaces with mineral spirits or other appropriate solution to remove accumulated film of wax, oil, grease, smoke, dust, dirt, chalky or other foreign matter which would impair the bond of, or bleed through the new paint finish. Patch imperfections, holes, dents to form a smooth surface.

d. Lightly sand the surface where existing finish remains tight and firm. Where the paint has been removed, sand the edges of scarred areas to a smooth feathered edge. Allow the surfaces to thoroughly dry and immediately spot prime bare metal areas with the specified primer and feather out onto adjacent paint.

10. Aluminum Surfaces Scheduled for Paint Finish:

a. Remove surface contamination by steam or high pressure wash.

b. Remove oxidation with acid etch and solvent washing.

c. Apply etching primer immediately following cleaning.

11. Asphalt, Creosote, or Bituminous Surfaces Scheduled for Paint Finish:

a. Remove foreign particles to permit adhesion of finishing material.

b. Apply compatible sealer or primer.

12. Insulated Coverings: Remove dirt, grease, and oil from covering material.

13. Copper Surfaces Scheduled for Paint Finish:

a. Remove contamination by steam, high pressure wash, or solvent clean.

b. Apply vinyl etch primer immediately following cleaning.

14. Copper Surfaces Scheduled for Natural Oxidized Finish:

    a. Remove contamination by applying oxidizing solution of copper acetate and ammonium chloride in acetic acid.

    b. Rub on repeatedly for required effect. Once attained, rinse surface with clear water and allow to dry.

D. Mildew Removal Preparation:

1. Remove mildew and sterilize the surface to be painted using one of the following methods:

    a. Apply a commercial mildew remover applied per manufacturer's instructions.

2. Following treatment, clean the surface with potable water and allow to thoroughly dry before priming, painting or applying sealing and caulking compounds.

E. Material Preparation: Mix and prepare paint materials according to manufacturer's written instructions.

1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.

2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.

3. Use only thinners approved by paint manufacturer and only within recommended limits.

4. Tinting: Tint each undercoat a lighter shade to simplify identification of each coat when multiple coats of same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

3.4 APPLICATION

A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.

1. Paint colors, surface treatments, and finishes are indicated in the paint schedules.

2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.

3. Provide finish coats that are compatible with primers used.

4. The term "exposed surfaces" includes areas visible when permanent or built- in fixtures, grilles, covers, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.

5. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only, unless otherwise noted.

6. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces.

7. Finish interior of wall and base cabinets and similar field-finished casework to match exterior.

8. Sand lightly between each succeeding enamel or varnish coat.

9. Ensure primers are top coated within the times required by the paint manufacturers. Top coats not applied within the recoating window may be rejected.

10. Exterior wood decking treated with oil-borne preservatives shall be primed with oil base primer prior to painting.

B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.

2. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

3. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.

4. Be aware of the requirements and restrictions of paragraph entitled "PROJECT CONDITIONS" hereinabove on spray painting.

C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.

1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.

2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.

3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.

D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.

E. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to items exposed in equipment rooms and occupied spaces.

F. Mechanical items to be painted include, but are not limited to, the following:

1. Uninsulated metal piping.

2. Uninsulated plastic piping.

3. Pipe hangers and supports.

4. Tanks that do not have factory-applied final finishes.

5. Visible portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets.

6. Duct, equipment, and pipe insulation having "all-service jacket" or other paintable jacket material.

7. Mechanical equipment that is indicated to have a factory-primed finish for field painting.

G. Electrical items to be painted include, but are not limited to, the following:

1. Switchgear.

2. Panelboards.

3. Electrical equipment that is indicated to have a factory-primed finish for field painting.

H. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.

I. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

J. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

K. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, runs, cloudiness, color irregularity, brush marks, orange peel, nail holes, or other surface imperfections.

1. Provide satin finish for final coats.

2. Stipple Enamel Finish: Roll and redistribute paint to an even and fine texture. Leave no evidence of rolling, such as laps, irregularity in texture, skid marks, or other surface imperfections.

L. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

3.5 FIELD QUALITY CONTROL TESTING

A. Inspection and Approvals: Unless directed otherwise by the Engineer, obtain written approval upon completion of each phase of work (phases of work are: surface preparation and spot prime, prime, first finish coat, second finish coat) before proceeding into the next phase or work. For any particular area of work that deviates from the submitted work schedule, notify the Engineer one day in advance when completing any phase of work. Provide access to areas to be inspected.

B. Failure to obtain approval of any phase of work for a work area may result in redoing the operation at no cost to the State.

C. Right of Rejection: Non conforming work will be rejected by the Engineer. Remove rejected material from the job site immediately. Redo rejected work at no cost to the State.

1. Where the required paint thickness is deficient, provide additional coats to the affected surface(s) to meet the required paint thickness.

3.06 CLEANING

A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from Project site.

1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping without scratching or damaging adjacent finished surfaces.

3.7 PROTECTION

A. Protect work of other trades, whether being painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Engineer.

B. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work.

1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

3.8 SCHEDULE OF FINISHES

A. The Schedule of Finishes is made for the convenience of the Contractor and indicates the types and quality of finishes to be applied to the surfaces. Provide additional systems for surfaces to be painted not listed hereinafter.

B. The Schedule or Finishes is as follows: Provide prime coat and one finish coat unless otherwise noted/scheduled or specified herein.

1. Provide primer and 2 finish coats over existing paint surfaces in poor condition; where color of existing paint is darker than new paint color; where one finish coat will not hide differences in color and shows streaking; where existing paint is peeling and flaking; and where there is rust and scaling on ferrous metal surfaces.

2. Provide primer and 2 finish coats on all new surfaces.

3. Paint with appropriate primer for the material being painted as per the manufacturer's recommendations.

4. Paint with appropriate finish coats for material being painted to match existing sheen and color unless otherwise noted/scheduled or directed by the Engineer.

5. Touch up paint with appropriate paint where noted/scheduled or directed by the Engineer.

C. Any existing painted surface not specifically noted in the finish schedule shall be finished to match adjoining work.

D. Provide stain and finish coat to match existing for re-finishing and/or repainting of existing stained doors, cabinets, etc. where indicated or where required.

END OF SECTION

DIVISION 12 - FURNISHINGS

SECTION 12490

SHADES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Manually operated roller shades with single rollers.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions for roller shades.

B. Shop Drawings: Show fabrication and installation details for roller shades, including shadeband materials, their orientation to rollers, and their seam and batten locations.

C. Samples: For each exposed product and for each color and texture specified.

D. Roller-Shade Schedule: Use same designations indicated on Drawings.

1.4 CLOSEOUT SUBMITTALS

Operation and Maintenance Data: For roller shades to include in maintenance manuals.

1.5 QUALITY ASSURANCE

Installer Qualifications: Fabricator of products.

1.6 DELIVERY, STORAGE, AND HANDLING

Deliver roller shades in factory packages, marked with manufacturer, product name, and location of installation using same designations indicated on Drawings

1.7 FIELD CONDITIONS

A. Environmental Limitations: Do not install roller shades until construction and finish work in spaces, including painting, is complete and dry and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operating hardware of operable glazed units through entire operating range. Notify Architect of installation conditions that vary from Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, or pre-approved equal:

1. MechoShade Systems, Inc.

2. Draper Inc.

3. Hunter Douglas Contract.

B. Source Limitations: Obtain roller shades from single source from single manufacturer.

2.2 MANUALLY OPERATED SHADES WITH SINGLE ROLLERS

A. Basis-of-Design: Basis of Design: Design is based on products indicated on the Drawings. Subject to compliance with requirements, provide; named product or a comparable product approved by Architect by one of the following or pre-approved equal:

1. MechoShade Systems, Inc.

2. Draper Inc.

3. Hunter Douglas Contract.

B. Chain-and-Clutch Operating Mechanisms: With continuous-loop bead chain and clutch that stops shade movement when bead chain is released; permanently adjusted and lubricated.

1. Bead Chains: Nickel-plated metal.

a. Loop Length: Full length of roller shade.

b. Limit Stops: Provide upper and lower ball stops.

c. Chain-Retainer Type: Chain tensioner, sill mounted.

C. Rollers: Corrosion-resistant steel or extruded-aluminum tubes of diameters and wall thicknesses required to accommodate operating mechanisms and weights and widths of shadebands indicated without deflection. Provide with permanently lubricated drive-end assemblies and idle-end assemblies designed to facilitate removal of shadebands for service.

1. Roller Drive-End Location: Right side of interior face of shade.

2. Direction of Shadeband Roll: Regular, from back (exterior face) of roller.

3. Shadeband-to-Roller Attachment: Manufacturer's standard method.

D. Mounting Hardware: Brackets or endcaps, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location and conditions indicated.

E. Shadebands:

1. Shadeband Material: Light-blocking fabric unless indicated otherwise.

2. Shadeband Bottom (Hem) Bar: Steel or extruded aluminum.

a. Type: Enclosed in sealed pocket of shadeband material.

b. Color and Finish: As selected by Architect from manufacturer's full range.

F. Installation Accessories:

1. Exposed Headbox: Rectangular, extruded-aluminum enclosure including front fascia, top and back covers, endcaps, and removable bottom closure.

a. Height: Manufacturer's standard height required to enclose roller and shadeband assembly when shade is fully open, but not less than 3 inches.
b. Endcap Covers: To cover exposed endcaps.

2. Side Channels: With light seals and designed to eliminate light gaps at sides of shades as shades are drawn down. Provide side channels with shadeband guides or other means of aligning shadebands with channels at tops.

3. Methods of sealing light gaps at bottoms of shades vary among manufacturers.

Shadeband bottom bars fit into bottom channels or butt against bottom angles to seal light leaks.

4. Bottom (Sill) Channel or Angle: With light seals and designed to eliminate light gaps at bottoms of shades when shades are closed.

5. Installation Accessories Color and Finish: As selected from manufacturer's full range.

2.3 SHADEBAND MATERIALS

A. Shadeband Material Flame-Resistance Rating: Comply with NFPA 701. Testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

B. Light-Filtering Fabric: Woven fabric, stain and fade resistant.

1. Source: Roller-shade manufacturer.

2. Type: Vinyl-coated polyester.

3. Roll Width: As indicated.

4. Thickness: 30 mils.

5. Orientation on Shadeband: Up the bolt.

6. Openness Factor: 1 percent maximum.

7. Color: As selected by Architect from manufacturer's full range.

C. Light-Blocking Fabric: Opaque fabric, stain and fade resistant.

1. Source: Roller-shade manufacturer.

2. Type: Vinyl-coated polyester.

3. Roll Width: As indicated.

4. Thickness: 14 mils.

5. Orientation on Shadeband: Up the bolt.

6. Color: As selected by Architect from manufacturer's full range.

2.4 ROLLER-SHADE FABRICATION

A. Product Safety Standard: Fabricate roller shades to comply with WCMA A 100.1, including requirements for flexible, metal chain-loop devices; lead content of components; and warning labels.

B. Unit Sizes: Fabricate units in sizes to fill window and other openings as follows, measured at 74 deg F:

1. Between (Inside) Jamb Installation: Width equal to jamb-to-jamb dimension of opening in which shade is installed less 1/4 inch per side or 1/2-inch total, plus or minus 1/8 inch. Length equal to head- to-sill or -floor dimension of opening in which shade is installed less 1/4 inch, plus or minus 1/8 inch.

2. Outside of Jamb Installation: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.

C. Shadeband Fabrication: Fabricate shadebands without battens or seams to extent possible.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, locations of connections to building electrical system, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ROLLER SHADE INSTALLATION

A. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions.

1. Opaque Shadebands: Located so shadeband is not closer than 2 inches to interior face of glass. Allow clearances for window operation hardware.

B. Roller Shade Locations: As indicated on Drawings.

3.3 ADJUSTING

A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

3.4 CLEANING AND PROTECTION

A. Clean roller shade surfaces, after installation, according to manufacturer's written instructions.

B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that roller shades are without damage or deterioration at time of project acceptance.

C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Project Acceptance.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain roller shades.

END OF SECTION

SECTION 12700

SYSTEMS FURNITURE

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS
As specified in Section 01019 - GENERAL SPECIFICATIONS, Special Provisions, and the General Conditions of the Contract.

1.2 DESCRIPTION OF WORK

A. Provide all scheduled furniture and furnishings as indicated on the drawings and specifies herein including the following:

1. Powered Modular Workstations.

2. ADA compliant Service Counter and Partitions.

3. Chairs.

1.3 SUBMITTALS

A. Submit in accordance with SECTION 01300 - SUBMITTALS.

B. Product Data - Submit each type of product indicated. Include manufacturer's written data on physical characteristics, durability, and published product literature. Include installation methods.

C. Shop Drawings: Submit shop drawings including plans and details showing the following:

1. Relationship between each furniture item and Sizes of each furniture item.

2. Anchorage conditions.

3. Type of installation.

4. All furniture and furnishings parts and components including but not limited to, panels, trims, supports, equipment, connectors, mounts, brackets, coverplates, casters, upholstery, glides, hinges, locks, pulls, cable routing, brackets, power kits, connectors, hardware, and all associated accessories.

5. Type, color, Finish surfaces, material types, edges, transitions, and other accessories.

6. Electrical and Telecom raceway, panels, interface requirements for facilities power and telecom interface.

D. Samples: Submit samples for each color and texture required for furniture(s) products proposed for. Label each sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings.

1. Workstation frame finish, profile finish, fabric tackable panel surface, laminates, worksurface finish, edges and trims.

2. Storage file tops and common tops, metal components, seamless edge banding, powder coated drawer and cabinet fronts and doors, lock finishes, pedestal cases, soft caster type/color.

3. Bookcase storage panel bottoms, false backs, hinged doors, tops, edge banding, shelves, glides, drawers.

4. Casegoods tops and common tops, metal components, seamless edge banding, powder coated drawer and cabinet fronts and doors, lock finishes, pedestal cases, caster color, worksurfaces, tackboards, and metal parts.

E. Maintenance Data - Submit for project records only: Include methods for maintaining furniture, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule, and precautions for cleaning materials and methods that could be detrimental to material surfaces.

F. Substitutions: Comply with the General Interim Conditions provisions, except that Contractors will not be required to "pre-approve" their products before bid, but can furnish other manufacturers' products that are comparable in quality to named products in paragraph entitled "PRODUCTS" hereinbelow.

G. Warranty: Submit written warranty as specified in paragraph entitled "WARRANTY" hereinbelow.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: An experienced manufacturer who can demonstrate quality manufacturing methods, shipping to Hawaii experience, and product placement within the State of Hawaii related to specified furniture requirements.

B. Installer Qualifications: An experienced installer who can demonstrate compliance with powered modular furniture installations and program requirements, multiple product installations within the past five years, and list of product installations within the State of Hawaii.

C. Product Options: Products and manufacturers named in Part 2 establish requirements for product quality in terms of appearance, construction, and performance. Other manufacturers' products comparable in quality to named products and complying with requirements may be considered.

D. ADA Compliance: Meet ADAAG 2010 requirements for clearances, circulation, knee clearances, heights, changes in level, operable parts, and other items.

E. Recycled Materials: CRI Green Label for recycling.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Comply with and in accordance with Manufacturer's Project specific requirements as fully submitted and successfully reviewed by the Engineer.

1.6 WARRANTY

A. Contractor's Warranty: Submit written warranty from the Furniture Installer and countersigned by the Contractor, covering all materials and workmanship for a period of one year from the project acceptance date. The warranty shall cover the correction by the Contractor of any defects in materials or workmanship which occur during the period of warranty by the repairing or replacing with new material at his own expense.

B. Manufacturer's Warranty:

1. Powered modular workstations: The manufacturer to submit a limited lifetime warranty which includes but not limited to:

a. 12-year warranty on electrical (non-USB) and A/V accessories.

b. 5-year warranty on Power Base Receptacles with USB.

c. 5-year warranty on vertical fabrics, fabrics rated Heavy Duty (A) under the Association of Contract Textile Guidelines.

d. A product modified under the basis of design furniture manufacturer will have the same warranty period as the standard catalog product that is modified. However, any material modification of the standard catalog product's features, construction, function or aesthetics will have a 1-year warranty.

e. For warranty terms and conditions refer to Manufacturer's warranty in affect from the project acceptance date.

PART 2 – PRODUCTS

2.1 FURNITURE

A. Products: Basis of Design for each product type:

1. As scheduled.

2. Or preapproved equal.

B. Powered modular workstation with desks:

1. Materials and Construction:

a. Panel Frame Construction: Consists of vertical (junctions) and horizontal (connecting bar) elements.

i. Panel Frame is fully welded and constructed with roll formed steel tubes welded together at the corners, forming a rectangular frame.

ii. Construction of the frame allows for horizontal routing of power & data at the beltline, below worksurface & base raceway.

iii. Horizontal tubes are punched to allow vertical routing of cables through each side of the panel frame.

iv. Steel legs are welded to the frame, creating a bottom trough to support the optional power system and cabling pathway when raceway covers are installed.

v. A steel base raceway cover conceals a high pathway for power and communication cabling.

vi. Vertical tubes are slotted to allow components to be mounted in 1" (25.4mm) increments.

vii. Horizontal aligner/light blocks provide support for segmented tiles and block light between them.

viii. Tiles in Fabric, Painted Metal, may be attached, providing an assembled thickness of 3" (76mm).

b. Panel Assembly Construction:

i. All panels have an overall assembled thickness of 3" (76mm).

ii. Panels have a height of 54 inches at workstations and 84" inches service counter partitions.

1) 84 inch height panels inclusive of 36 inch width, approximately 84 inch height privacy man door, integral ADA compliant door lever with ADA compliant locking device, and adjustable door slides on wheels.

iii. Tiles are removable and 54 inch height panels are monolithic at workstations. Tiles are removable and 84 inch height panels are segmented at service counter partitions.

iv. Top trim made from aluminum finished with powder-coat and provides a rectilinear profile.

v. Panel assemblies include a powder-coated steel pan/trough attached to the bottom. The trough is used with raceway covers to capture and enclose the power and data cabling in the base, ensuring it does not touch the surface of the floor.

vi. Raceway covers can be specified independently for each side of the panel and have up to two electrical or data openings per side. The covers are constructed from powder-coated steel and attach to the bottom of the panel frame with friction fit fasteners.

vii. Leveling glide is positioned at each end of the panel and provides 2.5" (64mm) of vertical adjustment capability. Answer panel leveler glides adjustments are 2-3/4"

viii. Panels can be connected in inline 90-degree conditions using combinations of block connectors and trim covers.

ix. Provide panels with power: Include pre-wired, factory installed electrical distribution system and inline flexible power connector. Powerkits for panels match the widths of the panels.

x. Power is available in Base Raceway (factory installed).

xi. Panels have capability to be easily converted in the field from powered to non-powered if necessary, by removing the electrical distribution system.

xii. Welded assemblies of slotted and notched 14 gauge steel channels for rigidity.

xiii. Seal is closed cell polyethylene foam minimum 1/8 inch thick.

xiv. Horizontal panel elements:

1) Welded assembly of rectangular 16 gauge steel tube and two 11 gauge end clips, 16 gauge hardened steel safety cams with riveted connections to bottom of each assembly for swivel and lock function into the vertical elements at each panel end.

c. Tile/Panel Construction:

i. All tile types have metal engagement clips or brackets for attachment to panel frame.

ii. Tiles or Panel infill are offered with the following surface options:

1) Fabric: Tackable glass fiberboard acoustical panel skins with full metal frame on all sides to facilitate panel connection and provide structural rigidity.

2) Frosted Glass stackers: 18” height.

2. Finishes:

   a. As indicated on Architectural Drawings.

   b. Finishes are to be consistent across manufacturer product platforms for consistency, compatibility, availability and longevity.

3. Tiles/Panels:

   a. Tiles are removable and 54 inch height panels are monolithic at workstations. Tiles are removable and 84 inch height panels are segmented at service counter partitions.

   b. Each tile may be used in any position (top, bottom, mid) on the panel.

   c. Tiles can be removed from the panel in any order during installation or reconfiguration.

   d. Multiple tile configurations can be accommodated on each side of panel.

   e. Concealed aligner light blocks are used in applications with multiple tiles per side of the panel to provide additional rigidity, alignment and light block between individual tiles.

   f. Spanning tiles will be Fabric and span across two panels, or two panels and a 3-way intersection, allowing for a seamless, non-segmented aesthetic.

   g. Tiles can span vertically over a base frame to create a monolithic aesthetic.

   h. All fabric tiles are tackable and have a metal frame for rigidity.

4. Panel Connectors and Trim Covers:

   a. The same universal connectors are used for 2-way, 3-way, and 4-way conditions.

   b. Provide intersections and covers facilitate the connection of panels in inline, 2-way, 3-way and 4-way conditions.

   c. T-Mount Kits are non-marring and available for off-modular panel and wall mount connections.

   d. Variable Height Covers allow for seamless height transitions between panels and are offered in end of run, 3-way and 4-way 90 degree.

5. Power and Communication:

a. System accommodates power and cable management needs through the modular electrical distribution system and multiple cable pathways.

b. Modular electrical system is available in the base raceway.

c. Panel Power:

    i. Provide 3-Circuit programmable power.

    ii. Hardwire – includes raceway covers for receptacle access. Receptacles, conduit, wiring and other associated components are field supplied.

d. Numerous infeed options are offered to route power from the base building into the panel.

    i. Powerkits for panels match the widths of the panels.

    ii. Base Feed Module: Hardwire Connection.

        1) One end hardwired to the building power (floor, column, wall) and modular end snaps into Power Distribution Assembly (PDA) in base of panel.

e. The following components may be used to route power through the panel/s depending on the specific application requirements:

    i. Power Distribution Assembly (PDA)-

        1. Powered panels include a PDA which is used to connect all other electrical components.

        2. Connector ports on PDA provide for the connection of flex connectors, top feeds and vertical power connectors.

        3. Receptacle ports are used for receptacles and as well as base feeds.

f. Power can be accessed by the end-user in several different ways.

    i. Deplex Receptacles.

        1) Receptacles attach to the PDA to allow access to the circuits distributed throughout a panel.

        2) 3-circuit 15-amp receptacles are field programmable to all three circuits.

g. Communication Cable Routing and Access.

    i. Distribution of communications cables is addressed with panel integrated cable pathways and access points.

ii. Cables can be routed through the Panel Base.

iii. Cables can be accessed at the Base raceway communication port.

h. Fixed return worksurfaces:

i. 48 inch width, 24 inch depth with two drawer file/file pedestal.

ii. 72 inch width, 30 inch depth with box/box/file pedestal.

iii. 42 inch width upmount overhead bin with task light.

i. Fixed service counter:

i. 84 inch width, 18 inch depth with two drawer file/file pedestal.

ii. 66 inch width, 48 inch depth.

iii. 66 inch width, 36 inch depth.

j. Supports distributed weight load of 250lbs.

k. Controls are intuitive, featuring up and down arrows visible to user; flush mounted.

l. Cable Riser to protect cables and cords from pinch points 1" x 1" and cable brackets to manage cords.

m. Laminate (high pressure laminate) worksurfaces (1" or 25mm nom. thick) and storage tops (1-3/16" or 30mm nom. thick) must feature balanced construction to prevent bowing or warping, with 0.028" (.71mm) +/-.004" (.1mm) thick laminate on the top surface and a 0.030" (.76mm) thick backer on the bottom. The wood core is medium density (45 lb/cu ft or 721 kg/cu m) commercial grade particle board. The laminate and backer are permanently attached and reinforced under pressure to the wood core using water-based polyvinyl acetate (PVA) adhesive.

6. Performance Requirements:

a. Structural Performance: Test in accordance with ASTM E 72.

i. Partitions must be capable of withstanding a uniformly distributed load of 5 psf. applied perpendicular to the partition without exceeding deflection of 1/240 of the partition height.

b. Panel shall conform to ANSI/BIFMA X5.6-2016 Standard for Panel Systems requirements.

c. Standard Panel Fabrics shall comply with NFPA 701, method 1, requirements or be tested in accordance with ASTM E 84 or UL 723, on entire assembled panel and have a flame spread rating not exceeding 25 and a smoke development rating not exceeding 450 (Class A Flammability Requirements).

d. Systems Panels shall be Listed to UL 1286.

e. Task Lighting products shall meet the UL and CSA Standards that are applicable for the product type and allow for their use in and on Commercial Office Furniture.

f. Storage pedestals, files are compliant with ANSI/BIFMA X5.9-2012 (Storage Units) or X5.6-2016 (Panel Systems with overhead shelving and units).

g. Freestanding elements shall conform to ANSI/BIFMA X5.5-2014 (Desks and Tables)

7. Sustainability Criteria

a. Total recycled content shall be greater than 50% combining both post-consumer and pre-consumer recycled content.

b. All metal components shall be 100% recyclable.

c. All materials shall be free of hexavalent chrome, CFC's, and PDBE's.

d. Adhesives used shall be solvent free and free of any hazardous air pollutants.

e. Metal parts shall be powder coated and finished with a durable VOC-free finish which is applied in a process that generates low levels of recyclable waste.

f. Forest Stewardship Council® (FSC) (license code FSC-C002821) certified materials must be available or on special order basis.

8. Task Chairs:

a. Meets or exceeds all ANSI/BIFMA X6.1 American National Standard for Educational Seating.

b. Tested to support up to 400lb weight capacity.

c. Backrest has adjustable lumbar support; adjustment is within reach of the seated occupant for additional comfort and support.

d. Back tension and recline control knob for easy user adjustment.

e. Backrest upholstery is 3D Knit.

f. Height, width, pivot depth adjustable arms.

g. Soft casters.

C. Man door within partition:

1. Materials and Construction:

a. Steel top caps at door frame head.

b. Rigid frame, constructed with rigid tubular steel.

c. Door panel, honeycomb core, rigid interior perimeter frame, interior angle supports, with exterior laminate surfaces all faces. Compatible with systems furniture partitions and panel frame.

d. Hinges, stardard on left, see floor plan.

e. Side Jambs, required at the hinge edge of the door.

f. Moldings at side jamb interface allowing absorbtion of sound as door opens and closes.

g. Door Hardware: ADA compliant lever, centered on door and standard on the right. Typical keying on the exterior (office lockset), keys to be coordinated with Engineer along with number of sets of keys to be issued to State.

h. Threshold, integrated with door assembly. ADA compliant requirement.

PART 3- EXECUTION

3.1 EXAMINATION

A. Field Verification: Verify that tolerances and other required conditions provided by other Installers are in conformance with requirements to ensure successful installations. Refer to Division 1 for additional general requirements.

3.2 INSTALLATION

A. General: Install in accordance with the Manufacturer's Project specific requirements as fully submitted and successfully reviewed by the Architect.

B. Layout:

1. Comply with Architectural drawing layout and clearances.

2. Comply with ADAAG requirements for accessible clearances.

3.3 DAMAGES, CLEANING AND PROTECTION

A. Perform the following operations immediately after installing furniture and furnishings:

1. General: Refer to Division 1 requirements.

2. Remove excess adhesive, other surface blemishes using cleaner recommended by manufacturer.

3. Protect furniture against damage from construction operations and placement of equipment and other fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by furniture manufacturer.

END OF SECTION

DIVISION 13 – SPECIAL CONSTRUCTION

SECTION 13282

LEAD PAINT CONTROL MEASURES

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

As specified in Section 01019 - GENERAL SPECIFICATIONS, Special Provisions, and the General Conditions of the Contract.

1.02 SUMMARY

In performing the handling of building components with lead paint, all possible safeguards, precautions and protective measures shall be utilized to prevent exposure of any individual to lead particulates.

1.03 DESCRIPTION OF WORK

A. Furnish all labor, materials and equipment necessary to carry out the safe removal, clean-up, proper handling, transportation and disposal of lead paint and associated debris in compliance with all applicable laws and regulations concerning lead, including all incidental and pertinent operations. The lead work at suite #110 shall generally include:

1. Selective demolition, removal and disposal of the suite #110, and L-shaped counter wall as identified in the Hazardous Material Inspection Report.

2. Work is to be completed when the room is vacant or after business hours between 4:45 P.M. to 7:00 A.M.

B. The Contractor shall be responsible for ensuring that all work generating lead debris conforms to the following applicable federal, state and local laws, codes, rules and regulations.

1. Occupational Safety and Health Administration (OSHA); Hawaii Occupational Safety and Health (HIOSH) standards and rules.

2. Environmental Protection Agency (EPA), Toxic Substance Control Act (TSCA), 40 CFR Part 745, Lead, Requirements for Lead Based Paint Activities in Target Housing and Child Occupied Facilities.

3. Environmental Protection Agency (EPA), Resource Conservation and Recovery Act (RCRA) of 1976, amended in 1980 and 1984.

1.04 COORDINATION WITH OTHER SECTIONS

The Contractor shall coordinate the demolition of lead painted or coated components with the Engineer, General Contractor and the Qualified Consultant.

1.05 CONTRACTOR RESPONSIBILITIES

A. The Contractor acknowledges that he alone is responsible for the instruction and for enforcing personnel protection requirements and that these specifications provide only a minimum acceptable standard. Contractor shall comply with all requirements of 29 CFR 1926.62 and 40 CFR 745. The Contractor shall also be responsible for complying with all applicable EPA regulations in regard to lead-containing materials.

B. The Contractor shall employ personnel trained in accordance with EPA 40 CFR 745.

C. Certify training as meeting all applicable federal, state, and local requirements.

D. Review and approve lead-paint control measures for conformance with applicable standards.

E. Provide the proper notifications to the State, Hawaii State Department of Health, and other agencies as required prior to starting work.

F. Continuously inspect lead-containing paint removal work for conformance with the approved work plan and specifications. Prepare a daily log of all lead disturbance/removal work done.

G. Perform personal air monitoring for Contractor and subcontractor workers exposed to the existing lead-containing paint hazard.

H. Control work to prevent hazardous exposure to human beings and to the environment.

I. Collect required submittals.

J. Compile the Lead-Paint Control Measures Report

1.06 GENERAL REQUIREMENTS

A. The work specified herein shall include the handling of components coated with lead, transportation and disposal procedures as required of lead-containing materials by persons with at least EPA Lead Training. This work must be performed in compliance with all applicable federal, state, and local regulations and be performed by workers who are capable of and willing to perform the work of this contract.

B. Applicable Standards and Guidelines: All work under this contract, and any other trade work conducted with the project, shall be done in strict accordance with all applicable federal, state and local regulations, standards and codes governing lead paint demolition, transportation and disposal of lead materials.

1. The most recent edition of any relevant regulation, standard, document or code shall be in effect.

C. Specific Statutory and Regulatory Requirements:

1. Title 29, Code of Federal Regulations, section 1926.62, Lead.

2. Title 29 Code of Federal Regulations Part 1910.134, Respiratory Protection.

3. Title 40 Code of Federal Regulations Part 61, National Emissions Standards for Hazardous Air Pollutants.

4. Title 40 Code of Federal Regulations Part 745, Lead; Requirements for Lead paint Activities in Target Housing and Child Occupied Facilities; Final Rule.

5. Guidelines for the Evaluation and Control of Lead paint Hazards in Housing.

1.07 DEFINITIONS

A. Action Level (AL): Employee exposure averaged over an 8-hour period, without regard to the use of respirators, to a particular airborne concentration. OSHA requirements become effective at this level. Lead: 30 micrograms per cubic meter of air.

B. Air Monitoring: The process of measuring the content of a specific, known, volume of air in a stated period of time. For this project, NIOSH 7082 method for lead monitoring.

C. Authorized Visitor: The Engineer, Qualified Consultant, their representatives, air monitoring personnel, or a representative of any regulatory or other agency having jurisdiction over the project.

D. Competent Person: Person employed or hired by the Contractor, who is educated and trained in recognizing and evaluating work place hazards and stress (in this instance, lead demolition and related work in accordance with 29 CFR 1926.62) and providing guidance on the methods and means of removing or correcting such hazards and stresses within the work environment.

E. Contaminated Area: An area where unwanted toxic or harmful substances exists.

F. HEPA Filter: A High Efficiency Particulate Absolute filter capable of trapping and retaining 99.97% of particulates greater than 0.3 micron in length.

G. Lead: Metallic lead, all inorganic lead compounds, and inorganic lead soaps. Excluded are all other organic lead compounds.

H. Monitoring Specialist: A person under the supervision of the Qualified Consultant who is trained in health and safety requirements for lead exposure and air-monitoring in accordance with 40 CFR 745 and 29 CFR 1926.62.

I. Permissible Exposure Limit (PEL): The employer shall ensure that no employee is exposed to concentrations greater than the PEL as determined from an 8-hour time weighted average. Lead: 50 micrograms per cubic meter.

J. Personal Monitoring: Contractor's sampling of lead in air concentrations within the breathing zone of an employee to determine the 8-hour time weighted average. The samples shall be representative of the employee's work tasks. The breathing zone shall be considered an area within 12 inches of the nose or mouth of an employee.

K. Qualified Consultant: Person hired by the General Contractor, who is educated and trained in recognizing and evaluating work place hazards and stress (in this instance, lead paint demolition and related work in accordance with 40 CFR 745 and 29 CFR 1926.62) and providing guidance on the methods and means of removing or correcting such hazards and stresses within the work environment.

1.08 ABBREVIATIONS

A. CFR: Code of Federal Regulations

B. HIOSH: Department of Occupational Safety and Health, Department of Labor and Industrial Relations, State of Hawaii

C. EPA: U.S. Environmental Protection Agency

D. NIOSH: National Institute for Occupational Safety and Health

E. OSHA: Occupational Safety and Health Administration

F. NESHAP: National Emissions Standards for Hazardous Air Pollutants

G. LP: Lead paint

H. TCLP: Toxicity Characteristic Leaching Procedure

1.09 SUBMITTALS PRIOR TO WORK

Final payment will not be made until copies of all submittals have been furnished to and accepted by the Engineer. Submit a completed and compiled electronic copy of the submittal package no later than ten (10) work days from the notice of award unless otherwise specified in this section. The submittal package will include the items listed below.

A. Detailed Work Plan: The Contractor shall submit a project work plan for the lead paint disturbance work. The Contractor shall also provide detailed information concerning:

1. Preparation of the work area.

2. Personal protective equipment including respiratory protection and protective clothing.

3. Employees who will participate in the project: Include documentation of experience, documented proof of lead removal training based on EPA 40 CFR 745 in addition to any current EPA regulatory requirements, and assigned responsibilities during the project.

4. Decontamination procedures for the personnel who may be exposed to lead paint.

5. Lead-containing paint treatment, handling and disposal methods and procedures to be used.

6. Required air monitoring procedures and sampling protocols.

7. Procedures for final cleanup.

8. A sequence of work and performance schedule in coordination with other trades.

9. Emergency procedures.

B. Shop Drawings: Submit to the Engineer shop drawings for the following items as a minimum:

1. Descriptions of any equipment to be employed not discussed in this section.

2. Security provisions, if any, in and around the project area.

3. Outline of work procedures to be employed.

4. Location of the waste storage area.

5. Staging of the work, the sequence.

6. Entrances and exits to the work place.

7. Location and construction of worker decontamination units.

8. Water filtration system for all contaminated water. Description of water disposal and copy of water disposal permit from the City and County of Honolulu, *Temporary Industrial Wastewater Discharge* Permit.

C. Competent Person: Qualification of the Contractor's Competent Person.

D. Notices: The Contractor shall obtain the facility's EPA Identification number for the disposal of hazardous waste.

E. Insurance: Proof of insurance for Workman's Compensation and General Liability which covers asbestos, lead, and pollution.

F. Manufacturer's Data: Copies of manufacturer's specifications, installation instructions and field test procedures for each material and all equipment related to lead handling and removal and include other data as may be required to show compliance with these specifications and proposed uses.

G. Documentation for Instructions: Submit documentation satisfactory to the Engineer Officer that the Contractor's employees, including foremen, supervisors, and any other company personnel or agents who will be exposed to airborne lead dust or who shall be responsible for any aspects of the lead paint removal work activities, have received training in accordance with this specification EPA 40 CFR 745 and any current EPA regulatory requirements.

H. Documentation from Physician: Before exposure to lead dust or fumes, the Contractor shall provide workers with a comprehensive medical examination as required by 29 CFR 1926.62, or whichever is stricter. This examination will not be required if adequate records show the employees have been examined as required by the aforementioned regulations within the last year.

I. Respirators: Submit document NIOSH approvals for all respiratory protective devices used on site. Include manufacturer certification of HEPA filtration capabilities for all cartridges and filters.

J. Emergency Planning Procedures:

1. The Contractor shall submit an emergency evacuation plan for the Engineer's acceptance prior to the commencement of work. This plan shall include consideration of fire explosion, toxic atmospheres, electrical hazards, slips, trips and falls, confined spaces and heat related injury. In non-life threatening situations, the injured or incapacitated employee shall decontaminate following normal procedures, with assistance from co-workers if necessary, before exiting the work area to obtain proper medical treatment. In life threatening situations, worker decontamination shall take least priority after measures to stabilize the injured worker, remove the injured worker from the work area, and secure proper medical treatment.

2. Emergency Response and Evacuation: The Contractor shall provide and document training in emergency response and evacuation procedures to all workers entering the work area.

K. Waste Disposal and Landfill Requirements: Contractor shall separate lead paint chips and debris from non-hazardous waste materials such as used plastics, disposable tools, etc. Contractor shall clean all bulk lead-containing debris and waste from non-hazardous plastic, tools, suits, etc. prior to disposal.

1. If Toxic Characteristic Leaching Procedure (TCLP) test results of the containers of waste material are below the EPA limit the lead-containing waste materials (paint chips, contaminated materials, etc.) shall be disposed of at a landfill approved for such purposes. The Contractor shall submit to the Engineer, documentation that the lead-containing waste material removed from the work area has been accepted by the landfill.

2. If the TCLP test results are above the EPA limit or if materials are identified as hazardous waste, the lead-containing waste materials shall be disposed of at an EPA approved facility capable of accepting such hazardous waste.

3. The Contractor shall submit to the Engineer, documentation that disposal of the lead-containing waste material at the selected landfill is approved by the State of Hawaii, or the EPA approved mainland facility for hazardous lead-containing waste material.

1.10 SUBMITTAL AFTER WORK IS COMPLETED

At the completion of the work, a final report shall be prepared by the Contractor for acceptance by the Engineer. The report shall be submitted electronically and shall include the items listed below.

A. The project name, Contractor, EPA waste generator number, work duration, material removed, respiratory protection employed, waste manifest signed by the Facility, total quantity of waste, TCLP lead reports, employee exposure air sample results, and results of the most current PAT round results for the laboratory conducting the employee exposure and ambient air sample analysis.

B. Certification of the Contractor's employees.

C. Visitor/Worker Entry Log: The daily log of all personnel including the Contractor's employees and agents who enter the work area while lead removal operations are in progress and until final clearance is received. The log shall contain the following information as a minimum and certified copies (certified by the Qualified Consultant) shall be submitted to the Engineer.

1. Date of visit/worker entry.

2. Visitor/worker's name, employer, business address and telephone number.

3. Time of entry and exit from work area.

4. Purpose of visit.

5. Type of protective clothing and respirator worn.

6. Certificate of release signed and filed with the Contractor.

D. Clearance certifications received from the Qualified Consultant.

E. A statement signed by the Contractor that all lead removal and disposal was completed in compliance with this specification, Federal and State regulations, and the approved Work Plan.

PART 2 - PRODUCTS

2.01 TOOLS AND EQUIPMENT

A. General: Provide and fabricate suitable tools for the lead disturbance procedures.

B. Other tools and equipment as necessary.

2.02 PERSONNEL PROTECTION REQUIREMENTS

A. The Contractor acknowledges he alone is responsible for instruction and for enforcing personnel protection requirements and that these specifications provide only a minimum acceptable standard.

B. Provide workers with sufficient sets of disposable protective full body clothing consisting of material impenetrable by lead and of the proper size for each individual to accommodate movement without tearing. Such clothing shall consist of full body coveralls, footwear, gloves and headgear. Provide hard hats as required by applicable safety regulations. Disposable clothing shall not be allowed to accumulate and shall be disposed of as lead contaminated waste. Protective clothing shall be worn by all personnel within the work area from the start of the removal to final visual clearance.

C. Insulated non-skid rubber boots or an approved equal shall be required for all individuals entering the work area. Protective full body clothing without elastic at sleeves and legs shall require separate elastic or taped protection to seal the opening. Visitors shall be provided full body protective clothing.

D. Additional safety equipment (e.g. hardhats meeting the requirements of ANSI Z-89.1-2014, eye protection meeting the requirements of ANSI Z87.1-2020, safety shoes meeting the requirements of ASTM F2413-18, disposable PVC gloves), as necessary, shall be provided to all workers and authorized visitors.

PART 3 - EXECUTION

3.01 POTENTIAL LEAD HAZARD

A. The disturbance or dislocation of lead paint and/or lead-containing materials may cause lead-containing dust to be released into the atmosphere, thereby creating a potential health hazard to the workers and the general public. Apprise all workers, supervisory personnel, subcontractors, consultants, authorized visitors, occupants and neighbors who will be at or near the job site of the seriousness of the hazard and of proper work and protective

procedures which must be followed (such as informing affected individuals as required by 40 CFR 745, keeping windows and doors closed; and air conditioning and ventilation units shut down during removal work).

B. Where in the performance of the work, workers, supervisory personnel, subcontractors, or consultants who may encounter, disturb, or otherwise function in the immediate vicinity of any identified lead-containing materials, take appropriate continuous measures as necessary to protect all workers and the general public from the potential hazard of exposure to respirable airborne lead dust. Such measures shall include the procedures and methods described in the regulations of applicable federal, state and local agencies.

3.02 WORK AREA PREPARATION

A. Protect occupants, tenant spaces, and surrounding area from possible contamination.

B. Treatment of Surfaces: During disturbance work, acceptable industry standard dust control methods shall be used to control dust (such as wetting items to be disturbed, by misting; provide dust screens; remove items in large, whole pieces; avoid crushing and pulverizing removal methods; encapsulate material prior to disturbance; use amended water; and containerize wet waste material). Prevent contamination spreading to the surrounding public and residential area.

C. NESHAP Compliance: Compliance with the requirements of EPA's NESHAP regulation is required for this project. Proper notification of the renovation of the building to the Department of Health shall be the Contractor's responsibility.

D. Ensure that all personnel working on site during the demolition work are properly trained and protected as required by law.

3.03 CLEANUP AND TESTING

A. Post-work visual clearance will be conducted by the Qualified Consultant.

B. All non-hazardous waste shall be removed from the site by the completion of the project. The Contractor, in the presence of the Competent Person, shall collect representative samples of the waste stream for TCLP lead analysis. All hazardous waste shall be removed from the site to an EPA approved disposal facility within ninety (90) days of the removal work.

C. Clean Up and Testing: HEPA vacuum and wet wash clean surfaces and surrounding ground within the lead control area daily. Do not allow lead painted/coated debris, paint chips, and dust to accumulate. Restrict the spread of dust and debris. Keep waste from being distributed over the general area. Do not dry sweep or use compressed air to clean the area. When the paint removal operation has been completed, the area will be cleaned of all visible lead paint contamination by vacuuming with a High Efficiency Particulate Absolute (HEPA) filtered vacuum cleaner followed by wet mopping where applicable. The Competent Person shall visually inspect the affected surfaces for residual lead paint chips and accumulated dust before the clearance wipe sampling and eventual removal of the lead controlled area. The

Contractor shall reclean areas showing dust or residual paint chips or if he fails visual and/or wipe clearance. If recleaning is required, the process will be repeated until the visual clearance and wipe sampling clearance is given by the Competent Person. Do not remove the lead control area or roped-off perimeter and warning signs prior to the Engineer's receipt of the Qualified Consultant's lead clearance certification.

3.04 TRANSPORTATION AND DISPOSAL

A. Disposal of Hazardous Waste and Non-hazardous Waste: Contractor shall separate potentially non-hazardous waste material (i.e. plastic sheeting, disposable protective suits, etc.) from hazardous waste material prior to testing. All other debris, scraps, waste materials, rubbish and trash contaminated with lead paint and contaminated dust from the immediate work area and place in United Nations (UN) approved (49 CFR 178) and appropriately labeled containers and store on site for TCLP lead testing. The Contractor shall be responsible for collecting and paying of all TCLP testing.

1. Local waste landfill facilities do not accept any Resource Conservation and Recovery Act hazardous waste. All hazardous waste must be disposed of at an EPA approved mainland hazardous waste disposal facility. Hazardous waste must be disposed of within ninety (90) days of the waste being created.

2. Non-hazardous lead waste and debris may be disposed of at the local waste landfill facility that is State approved to accept such waste.

    a. Notify Non-hazardous Waste Landfill Operator: The Contractor shall advise the Non-hazardous Waste landfill operator, at least twenty-four (24) hours prior to transportation, of the material to be delivered.

    b. Provide the Non-hazardous Waste Landfill Operator with applicable TCLP results which indicate that the waste material is non-hazardous.

B. Disposal of Non-Hazardous Painted Construction Debris (TCLP for Lead Not Exceeding EPA Limits): Remove non-hazardous lead waste including, debris, scraps, waste materials, rubbish, and trash from the site and disposed of at a landfill approved for disposal of lead painted materials. Disposal of non-hazardous lead-contaminated material shall be performed in accordance with this specification.

C. The Contractor shall submit disposal manifest and receipts showing acceptance of all waste material by the approved waste disposal site to the Qualified Consultant. The shipping papers shall include a chain-of-custody form and include names and addresses of the Facility, the Contractor, and the Landfill Operator and information on the type and number of waste containers.

3.05 CLEARANCE CRITERIA

Visual clearance of the work area shall be performed by the Qualified Consultant. Any additional clearance inspection, sampling and analysis initiated by the Contractor or required

due to failure of the first set of clearance inspection and sampling, shall be at the Contractor's expense.

3.06 TESTING AND AIR MONITORING

A. The Qualified Consultant shall have the authority to instigate engineering controls during the project.

B. Testing, daily area (environmental) and employee exposure air monitoring and final clearance inspections shall be provided by the Qualified Consultant, for the purpose of:

1. Verifying compliance with this section and the applicable regulations listed in this section.

2. Ensuring that the documentation required by this section and by law is collected and reported to the State.

3. Instigating engineering control during the project.

3.07 CONTRACTOR RESPONSIBILITIES

A. The Contractor shall be responsible for all TCLP lead testing and analysis.

B. The Contractor shall be responsible for his employees' personnel protection, personal air monitoring and necessary records as required by OSHA, Hawaii State Law and as required in these specifications. Contractor shall collect daily personal air samples on at least 25 percent of the personnel performing removal work with the most exposure for the duration of the project.

3.08 MONITORING RESULTS

A. Airborne lead levels in areas adjacent to the work area or in any part of the work site impacted by the removal activities shall not exceed 30 micrograms per cubic meter of air.

B. If the ambient concentrations exceed 30 micrograms per cubic meter of air, the Contractor shall cease all work immediately in any work area causing or contributing to such a condition. The Contractor shall take remedial action (e.g. misting with more water, encapsulation, provide dust screens, etc.) to reduce concentrations to acceptable levels.

C. The Contractor is solely responsible for monitoring his personnel in compliance with all OSHA and HIOSH requirements.

END OF SECTION

DIVISION 16 - ELECTRICAL

SECTION 16010

GENERAL ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

The General Provisions of the contract, including General Specifications, Interim General Conditions, any Special Provisions and General Requirements of the Specifications, apply to the work specified in this section.

1.2 DESCRIPTION OF WORK

A. This section specifies the general electrical requirements for all labor, materials, equipment, and services provided under DIVISION 16 - ELECTRICAL.

1.3 SUMMARY

A. The Contractor under this Division shall provide all labor, materials, equipment, supervision, and services required for the construction of the electrical systems. The finished installations shall be complete, operable and shall include all work specified herein and shown on the Drawings.

B. The work shall include complete testing of all equipment and wiring at the completion of the work and making any minor connection changes or adjustments necessary for the proper functioning of the system and equipment. All systems shall be properly adjusted and in working order at the time of final acceptance.

C. All miscellaneous metal-work and painting shall conform to the applicable requirements of the detailed equipment specifications as prescribed in appropriate sections.

D. It is the intent of these Specifications and other Contract Documents to require an installation complete in every detail. Consequently, the Contractor will be responsible for minor details or for any special construction which may be found necessary to properly furnish, install, adjust, test, and place in successful and continuous operation, the entire electrical system, and the cost of same shall be included in the contract price.

1.4 DESCRIPTION OF WORK

Work specified in this Division shall include, but not be limited to the following:

1. Complete electrical system wiring including branch circuits and outlets.

2. Testing. Any testing shall be done after business hours with no additional cost to the State.

1.5 REFERENCES

A. Comply with local ordinances; National Electrical Code; National Electrical Safety Code; applicable regulations of the National Board of Fire Underwriters; specifications of ANSI, NEMA, UL, IES, and IPCEA; and regulations of the City & County of Honolulu.

B. In the event of conflict between pertinent codes and regulations, and the requirements of the referenced standards, or those indicated in Specifications and on drawings, the provisions of the more stringent shall govern.

1.6 SUBMITTALS

A. Submit in accordance with Section 01300 - SUBMITTALS.

B. Certificates: Submit written certification that electrical systems are complete and operational as stipulated in item entitled "DEMONSTRATION OF COMPLETE ELECTRICAL SYSTEMS" hereinbelow.

C. Test records.

D. Warranty: Submit warranty as stipulated in item entitled "WARRANTY" hereinbelow.

E. As-Built Drawings: Submit in accordance with the project specifications.

1.7 QUALITY ASSURANCE

A. In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "shall" had been substituted for "should" wherever it appears. Interpret references in these publications to the "authority having jurisdiction," or words of similar meaning, to mean the Engineer. Equipment, materials, installation, and workmanship shall be in accordance with the mandatory and advisory provisions of NFPA 70 unless more stringent requirements are specified or indicated.

B. Provide materials and equipment that are products of manufacturers regularly engaged in the production of such products which are of equal material, design, and workmanship. Products shall have been in satisfactory commercial or industrial use for 2 years prior to bid opening. The 2-year period shall include applications of equipment and materials under similar circumstances and of similar size. The product shall have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 2-year period. Where 2 or more items of the same class of equipment are required, these items shall be products of a single manufacturer; however, the component parts of the item need not be the products of the same manufacturer unless stated in the technical section.

C. Products manufactured more than 3 years prior to date of delivery to site shall not be used, unless specified otherwise.

D. Equipment, materials, installation, and workmanship shall be in accordance with the mandatory and advisory provisions of NFPA 70.

1.8 COORDINATION

A. Refer to all project Drawings and to all Sections of the project Specifications. Coordinate and fit all work accordingly so that all electrical outlets and equipment will be properly located and readily accessible. The Drawings indicate the relation of wiring and connections and must not be scaled for exact locations.

B. Verify all construction dimensions at the project and make changes necessary to conform to the building as constructed. Work improperly installed due to lack of construction verification shall be corrected at the Contractor's expense.

C. Work shall be scheduled to avoid delays, interferences, and unnecessary work. If any conflicts occur, necessitating departures from the Drawings and Specifications, details of departures and reasons therefore shall be submitted immediately for consideration by the Engineer.

1.9 DELIVERY, HANDLING AND STORAGE

A. Deliver all materials of this Division in manufacturer's original unopened packages or containers with label intact and legible.

B. Use means necessary to protect the materials of this section before, during and after installation; to protect the installed work and materials of all other trades; and to protect the original structure, work, and materials of the State.

C. In the event of damage, immediately make all repairs and replacements necessary to the acceptance of the Engineer and at no additional cost to the State.

1.10 DRAWINGS AND SPECIFICATIONS

A. Electrical system drawings are diagrammatic and symbolic. Locations of outlets, devices, raceways, apparatus, etc., shown are approximate and shall be installed with the required maintenance and code clearances and to avoid conflict with other systems and trades. Visit site and verify lineal footages required and check scales and dimensions shown on architectural drawings prior to bidding to verify locations, routing and lineal footages of electrical work required for inclusion into bid. Study the project drawings and specifications and make installation in most logical manner for eye appeal and coordination with other systems and trades. Unless dimensioned or noted otherwise, orderly configuration and visual composition are fully intended.

B. Include additional components and wiring which are not shown or specified herein but are required for proper control and operation to provide for a complete and operable system within intent indicated on the drawings and specifications.

C. Study the project drawings and specifications prior to bidding and provide additional wiring including apparatus and devices for equipment furnished by others without additional cost.

D. Relocate devices, apparatus and associated wiring including raceways, from locations shown, without additional cost, for code compliance and to avoid conflict with other systems or trades, structures, utilities and when directed before installation.

1.11 WARRANTY

A. Installation shall be complete in every detail as specified and ready for use. Unless otherwise indicated, any items supplied by Contractor developing defects of design, construction, or quality within one year of final acceptance by Engineer shall be replaced by such new materials, apparatus, or parts to make such defective portion of the complete system conform to the true intent and meaning of the Drawings and Specifications at no additional cost to the State.

B. The warranty shall be countersigned by the General Contractor.

PART 2 - PRODUCTS

2.1 MATERIALS AND WORKMANSHIP

A. All materials shall conform to the latest issue of all applicable standards as established by NEMA, NFPA, ANSI, IEEE, IES, ASTM and Underwriters' Laboratories, and shall bear the manufacturer's name and trade name and when available, the Underwriters' Label.

B. Neat appearances in the finished work will be required. Only experienced electrical workers shall be employed for the electrical installation.

C. All work not installed and completed in accordance with the latest rules and regulations of the NEC, OSHA and all local ordinances shall be removed and reinstalled correctly at the Contractor's expense.

PART 3 - EXECUTION

3.1 GENERAL

A. Install all electrical materials and equipment in accordance with manufacturer's recommendations and as accepted by the Engineer for the seismic zone classification at the project site in accordance with the Building Code.

B. Cut, break, drill and patch as required, to install electrical system. Repair any surface damaged or marred by notching, drilling, or any other process necessary for installation of electrical work. Patch any damaged surfaces to match the existing surface.

C. The Electrical Contractor shall coordinate his work with other trades to avoid conflicts with architectural elements of this project.

3.2 JOBSITE CONDITIONS

A. These specifications are accompanied by construction drawings including building plans showing locations of outlets, switches, devices, and other electrical equipment. The locations are approximate and before installing, study adjacent architectural details and make installation in most logical manner. Any device may be relocated within 10'-0" before installation at the direction of the Engineer without additional cost to the State.

B. Before installing, verify all dimensions and sizes of equipment.

C. Verify that electrical system may be installed in strict accordance with the original design, the Drawings and Specifications and the manufacturer's recommendations.

D. In the event of discrepancy, immediately notify the Engineer. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

3.3 DEMONSTRATION OF COMPLETE ELECTRICAL SYSTEMS

A. Submit written certification that electrical systems are complete and operational. Submit certification with Contractor's request for final review.

B. At the time of final review of electrical work, demonstrate the operation of electrical systems. Provide labor, apparatus, and equipment for systems' demonstration. The various tests shall be under the direction and supervision of the Engineer.

C. The Contractor shall provide all test equipment, materials, labor, and temporary power hook-ups to perform start-up and all tests as required, to obtain final field acceptance from the State. All tests shall be conducted in the presence of the Engineer or his representative. All test procedures shall conform to this specification and applicable standards. (ANSI, IEEE, NEMA, OSHA, NFPA, NETA, etc.)

D. The Contractor shall be responsible for all tests and test record. Testing shall be performed by and under the immediate supervision of the Contractor. Test records shall be kept for each piece of equipment. Copies shall be furnished to the Engineer for his review and/or acceptance.

E. A visual inspection of all electrical equipment, to check for foreign material, tightness or wiring and connection, proper grounding, matching nameplate charts with specification, etc., shall be made prior to actual testing.

END OF SECTION