



Repairs of Ceiba Readiness Center
FEMA Project #95343
Ceiba, Puerto Rico

TABLE OF CONTENTS

PART 1: GENERAL INFORMATION

- 1.1 ACRONYMOUS
- 1.2 DEFINITIONS
- 1.3 DESCRIPTION
- 1.4 BACKGROUND
- 1.5 PERFORMANCE PERIOD
- 1.6 FUNDS

PART 2: COST PROPOSAL CONSIDERATION

- 2.1 SCOPE OF WORKS
- 2.2 CONDITIONS
 - 2.2.1 GENERAL CONDITIONS
 - 2.2.2 UNIFORM GENERAL CONDITIONS FOR PUBLIC WORKS
CONTRACTS OF PUERTO RICO
 - 2.2.3 CONTRACT CLAUSES REQUIRED IN PURCHASES AND CONTRACTS
WITH FEDERAL FUNDS
 - 2.2.4 HUD GENERAL PROVISIONS
 - 2.2.5 HUD 4010
 - 2.2.6 IMPERATIVE INCLUSION CLAUSES
 - 2.2.7 SECURITY AND PROTECTION REQUIREMENTS
 - 2.2.7.1 Anti-Terrorism/Force Protection
 - 2.2.7.2 iWATCH
 - 2.2.7.3 TARP

ATTACHMENT LIST

ATTACHMENT 1: Scope of Works

ATTACHMENT 2: Uniform General Conditions for Public Works Contracts in Puerto Rico

ATTACHMENT 3: Contract Clauses Required in Purchases and Contracts with Federal Funds

ATTACHMENT 4: HUD General Provisions

ATTACHMENT 5: HUD 4010

ATTACHMENT 6: Imperative Inclusion Clauses

PART 1

GENERAL INFORMATION

1.1 ACRONYMOUS

1.2 DEFINITIONS

1.3 OVERVIEW

1.4 DESCRIPTION

1.5 PERFORMANCE PERIOD

1.6 FUNDS

PART 1: GENERAL INFORMATION

1.1 ACRONYMOUS

ASG Administración de Servicios Generales
AT/OPSEC Antiterrorism/Operational Security Background Investigation
CAC Common Access Card
CD Compact Disc
CFMO Construction and Facilities Management Office
CFR Code Federal Regulation
CPM Critical Path Method
CPT Captain
CTRA Colegio de Técnicos de Refrigeración de Aire Acondicionado
DD Department of Defense
DDD Damage, Description, and Dimensions
DoD Department of Defense
DFARS Defense Federal Acquisition Regulation Supplement
DoD Department of Defense
FAR Federal Acquisition Regulation
FEMA Federal Emergency Management Agency
FIGNA Fideicomiso Institucional de la Guardia Nacional de Puerto Rico
FPCON Force Protection Condition
NGB National Guard Bureau
OSHA Occupational Safety and Health Agency
POC Point of Contact
PRARNG Puerto Rico Army National Guard
RC Readiness Center
RFI Request for Information
RUL Registro Unico de Licitadores
SAM System for Award Management
SF Square Feet
US United States

1.2 DEFINITIONS

Change Order - A written order issued by the PRARNG, or its duly authorized representative, to the Contractor, signed by both parties, covering, additions, deletions, and/or revisions in the Work and/or an adjustment in the Contract Price and/or the Contract Time, if any, issued on or after the Effective Date of the Contract. In Unit Price Contracts, a Change Order can also reflect a change in the number of items, as well as an increase or decrease, contained in the proposal. In Lump Sum Contracts, it reflects an order for additional or less work.

Contract - a written agreement, especially concerning with detailed services herein in this document.

Contractor - is an individual or entity that conducts business and is duly organized under the laws of the Government of Puerto Rico or foreign commercial organizations authorized to do business in Puerto Rico, registered in "Registro Unico de Licitadores" under the Puerto Rico General Services Administration (ASG), with: Unique Entity Identifier, CAGE Number and be active in SAM Registry. It will be who be select to perform the services and works described in this request.

Days - this term will be considered as calendar days.

Government - means Government of Puerto Rico , it is inclusive but not limited to other branches, municipalities and instrumentalities that administer Puerto Rico.

OWNER – means Puerto Rico Army National Guard.

PRARNG – means Puerto Rico Army National Guard.

Project Manager - The professional licensed and collegiate Engineer or Architect, designated in accordance with the Contract as the Contractor's authorized representative who is made by Contractor responsible for and placed in charge of the Work.

Project Schedule - A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Work

within the Contract Time.

Subcontractor - A Subcontractor is an individual or entity that has a direct contract with the Contractor to perform any of the Work at the Site. The term Subcontractor as referred throughout the Purchase Order Documents means the Subcontractor or his authorized representative.

1.3 OVERVIEW

The Ceiba Readiness Center (Ceiba RC) named CPT Alejo Rivera Morales was built in November 15, 1976. It serves as home to the Puerto Rico State Guard. The Ceiba RC is located at PR 3, KM 51.7 Ceiba, Puerto Rico. The property consists of a parcel of land comprising 1.88 acres with an armory building comprising a total area of 20,245.91SF. The armory building is a one story reinforced concrete blocks building is used for offices, classroom, storage areas with metal gates, dormitory, kitchen area, vault, and a large assembly hall in the middle of the structure. In addition, it has a FIGNA store. Also, the property has paved areas, parking facilities, fences, and a guardhouse.

1.4 DESCRIPTION

The services in this scope of work are intended for the rehabilitation of all damages received during Hurricane María in the sites included and as described in the Damage, Description and Dimensions (DDD) Report generated by FEMA.

1.5 PERFORMANCE PERIOD

Contractor will develop the activities indicated in the scope of work in a term of 270 days.

1.6 FUNDS

Appropriation funds for the project are insurances, FEMA and CDBG-DR.

PART 2

COST PROPOSAL CONSIDERATION

2.1 SCOPE OF WORKS

2.2 CONDITIONS

2.2.1 GENERAL CONDITIONS

2.2.2 UNIFORM GENERAL CONDITIONS FOR PUBLIC WORKS CONTRACT OF PUERTO RICO

2.2.3 CONTRACT CLAUSES REQUIRED IN PURCHASES AND CONTRACTS WITH FEDERAL FUNDS

2.2.4 HUD GENERAL PROVISIONS

2.2.5 HUD 4010

2.2.6 IMPERATIVE INCLUSION CLAUSES

2.2.7 SECURITY AND PROTECTION REQUIREMENTS

2.2.7.1 Anti-Terrorism/Force Protection

2.2.7.2 iWATCH

2.2.7.3 TARP

2.1 SCOPE OF WORKS

Refer to Attachment 1

2.2 CONDITIONS

2.2.1 General Conditions

1. The proposal must include the payment of all applicable state and municipal taxes and patents as require by Law. The Contractor shall be paid taxes prior to start the works and will be required to present evidence of these payments.
2. Along the duration of contract, Contractor must comply with Federal Non-Discrimination policy and Drug-Free Workplace Policy.
3. Any waste generated as part of the contract must be disposed outside of PRARNG facilities and in accordance with applicable laws and regulations.
4. The Contractor is responsible for provide to PRARNG copy permits hauling vehicle that transport material generated as part of the proposed activities.
5. If applicable the Fuel Oil and Gas (F.O.G.) shall be no more than 25% of the equipment charges.
6. If applicable the Fringe Benefits shall be no more than 30% of the payroll.
7. Working hours at the facility are from 7:30a.m. to 4:00p.m. Any activities to be developed off working hours must be coordinated with PRARNG and the execution will be pending approval from PRARNG and without additional charges.
8. Any person who as part of the activities of the contract will access the facilities on behalf of the Contractor should be have at all times a photo ID. Accepted identifications are passport driver s license or ID card issued by the Department of Transportation and Public Works (DTOP).

9. All the provide information as part of this acquisition process, including but not limited to plans, statement of works, and photography, is for the exclusive use of this acquisition process. Any reproduction and distribution of the material for other use is prohibit.
10. Portable Toilet Facilities: Contractor shall be responsible for providing sanitary services for its employee's throughout the duration of the activities of the contract. Toilets shall be regularly cleaned and emptied as required by Health regulations.
11. Award of Subcontracts for Portions of the Work,
 - Unless otherwise specified in the Contract Documents the Contractor, as soon as practicable after the signing of the Contract, shall furnish to the PRARNG's Representative in writing for his acceptance a fist of the names of the main Suppliers and Subcontractors proposed for the principal portions of the Work.
 - The Contractor must be submit the Certification of Subcontractors and Suppliers provide by PRARNG. As part of this Certification of Subcontractors and Suppliers is required that the Contractor provide a copy of the Payment and Performance Bonds.
 - All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of PRARNG's Representative, PRARNG and Architect/Engineer, including required contract provisions applicable to Federal Agency funded projects.
12. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility and utilities services in site.
13. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site that was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work.

14. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and PRARNG's Representative has issued a notice to PRARNG and Contractor of Final Acceptance of the Work (except as otherwise expressly provided in connection with Substantial Completion).
15. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs. The safety representative at the Site may have other duties assigned to him.
16. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available at the site in accordance with laws or regulations.
17. Any other fees or charges related to permitting to be paid by the Contractor will be indicated in the special conditions.
18. The Contractor is responsible to obtain all permits and certifications of approval required in connection with this statement of works.
19. The Contractor is responsible to develop and submit a Work Plans for cleaning, removal and disposing of the contaminated material.
20. Hold Harmless is required.
21. Terrorism coverage is required.
22. Contractor shall assume full responsibility for any damage to any such land or area, or to the PRARNG or occupant thereof, or of any adjacent land or areas, resulting from the performance of the Work.
23. The Contractor is responsible for the removal of debris during performance of the Work.
24. During the progress of the Work, Contractor shall keep the Site and other areas free from excessive accumulations of waste materials,

rubbish, and other debris caused by his operations on the Site.

25. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

26. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Purchase Order Documents.

27. If the Contractor fails to clean up as indicated above, the PRARNG may do so and the cost thereof shall be charged to the Contractor.

28. All materials and equipment acquired by the Contractor as part of the Purchase Order must meet with the Build American, Buy American (BABA) Act.

29. The Contractor is responsible of the quality of the all materials and workmanship furnished in the services and is included in the bid price and no additional payment will be made by PRARNG.

30. The Contractor will be allowed to stored materials and equipment used in the project within the facility. It is the Contractor's responsibility to provide the storage, security materials, and equipment.

31. The Contractor will be responsible for submitting a "Site Safety and Health Plan" for approval by the staff of the PRARNG, according to the date scheduled. Mobilization to the site cannot be made until the plan is approved.

32. Project limit fence shall be 4' silt fence and 3.5' HDPE Orange plastic mesh safety fence barrier, reinforced with 2" x 4" wood stakes.

33. Davis Bacon and Related Act (DBRA) apply for this project.

2.2.2 Uniform General Conditions for Public Works Contract of Puerto Rico

All costs associated and related with the Uniform General Conditions for public Works Contract of Puerto Rico will be part of the cost proposal. See *Attachment 2*

2.2.3 Contract Clauses Required in Purchases and Contracts with Federal Funds

All costs associated and related with the Contract Clauses Required in Purchases and Contracts with Federal Funds will be part of the cost proposal. *See Attachment 3*

2.2.4 HUD General Provisions

All costs associated and related with the HUD General Provisions will be part of the cost proposal. *See Attachment 4*

2.2.5 HUD 4010

All costs associated and related with the HUD General Provisions will be part of the cost proposal. *See Attachment 5*

2.2.6 Imperative Inclusion Clauses

All costs associated and related with the Imperative Inclusion Clauses will be part of the cost proposal. *See Attachment 6*

2.2.7 Security and Protection Requirements

The Bidder, Team and all associated Subcontractor personnel must provide all information required for background checks to comply with the requirements for access to the facilities to be performed by the Provost Marshal Office, Director of Emergency Services or the Office of Security. The Proposing workforce must comply with all personal identity verification requirements (clause FAR 52.204- 9, Verification of personal identification of Contractor personnel) as directed by the Department of Defense, HQDA and / or local policy. In addition to the changes authorized by the change clauses of this Purchase Order, if the Force Protection Condition (FPCON) in any individual installation or insulation change, the Government may require changes in the Contractor's security issues or processes.

The photographs will be limited to the authorized work area with the prior approval of the PRARNG and only for information purposes for the development of the services described in this document. The Contractor must request permission from the PRARNG before taking the photographs and will be governed by the instructions offered for taking them. The use of drone to take is prohibited.

2.2.7.1 Anti-Terrorism/Force Protection

AT Level I training, all awarded Contractor's personnel, to include subcontractor personnel, requiring access PRARNG installations, facilities and controlled access areas shall complete AT Level I awareness training within fourteen (14) calendar days after Purchase Order start date or effective date of incorporation of this requirements into the Purchase Order, whichever is applicable. The awarded Bidder shall submit certificates of completion for each affected Contractor's personnel and subcontractor's personnel to the Contracting Officer Representative (COR) within seven (7) calendar days after completion of training by all personnel. AT Level I awareness training is available at the following website: <http://jko.jten.mil> The PRARNG can provide the instructions (2 hours) with previous coordination.

- Access and general protection/security policy and procedures. Awarded Bidder and all associated subcontractor's personnel shall provide all information required for background checks to meet installation access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Awarded Bidder workforce must comply with all personal identity verification requirements (FAR clause 52.204-9, Personal Identify Verification of Contractor Personnel) as directed by DoD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this Purchase Order, should the Force Protection Condition (FPCON) at any individual facilities or installation change, the Government may require changes in contractor security matters or processes.
- Awarded Bidder and all associated sub-contractor's personnel shall comply with all standards and policies for all PRARNG installations and facilities to include access and local security policies and procedures (provided by government representative). This applies for contractors that do not require CAC but require access to a DoD facilities or installations.

2.2.7.2 iWATCH

iWATCH training, Contractor's personnel, to include subcontractor personnel, requiring access PRARNG installations, facilities and controlled access areas shall complete iWATCH awareness training within fourteen (14) calendar days after Purchase Order start date or effective date of incorporation of

this requirement into the Purchase Order, whichever is applicable. The Contractor shall submit certificates of completion for each affected Contractor's personnel and subcontractor's personnel to the Contracting Officer Representative (COR) within ten (10) calendar days after completion of training by all personnel. The PRARNG can provide training in face-to-face to personnel of Contractor and Subcontractor (1 hour) with previous coordination.

2.2.7.3 TARP

Threat Awareness and Reporting Program (TARP) training, Contractor's personnel, to include subcontractor personnel, requiring access PRARNG installations, facilities and controlled access areas shall complete TARP awareness training within fourteen (14) calendar days after Purchase Order start date or effective date of incorporation of this requirement into the Purchase Order, whichever is applicable. The Contractor shall submit certificates of completion for each affected Contractor's personnel and subcontractor's personnel to the Contracting Officer Representative (COR) within ten (10) calendar days after completion of training by all personnel. The PRARNG can provide training in face-to-face to personnel of Contractor and Subcontractor (2 hours) with previous coordination.

Attachment 1

SCOPE OF WORKS

SCOPE OF WORK (SOW)
Construction Services
“Repairs of Ceiba Readiness Center- FEMA
Project #95343”
Puerto Rico Army National Guard (PRARNG)

1. INTRODUCTION

This document defines the work that the Proposer shall perform for the “Restoration and Repairs of Ceiba RC”. The Proposer shall provide all work in connection with the repair and installation of items listed in the Damage, Description, Dimensions Report validated by Federal Emergency Management Agency (FEMA). The Contractor is to provide the Puerto Rico Army National Guard (PRARNG) with all costs associated with the restoration of the facility to its pre-disaster design and function.

The contractor will be directly responsible for ensuring the accuracy, timeliness, and completion of all tasks assigned under this contract. The scope of work presented is based upon circumstances existing at the time of solicitation. The PRARNG reserves the right to modify or delete the tasks listed and, if appropriate, add additional tasks prior to and during the term of the contract.

The following information is provided for Proposers to consider and estimate the necessary resources and activities to develop the Project. Proposers shall consider that all activities shall be performed in compliance with FEMA guidelines.

1.1 Location: Ceiba (Pueblo) Readiness Center, Ceiba, Puerto Rico

1.1.1 See **EXHIBIT A –Site plans**

1.1.2 Physical Address: PR 3 Km 51.7, Ceiba, PR 00735

1.1.3 Coordinates: Latitude: 18.260270, Longitude: -65.649254

1.2 Background:

1.2.1 The Ceiba Readiness Center (Ceiba RC) named CPT Alejo Rivera Morales was built in November 15, 1976. It serves as home to the Puerto Rico State Guard. The Ceiba RC is located at PR 3, KM 51.7 Ceiba, Puerto Rico. The property consists of a parcel of land comprising 1.88 acres with an armory building comprising a total area of 20,245.91SF. The armory building is a one story reinforced concrete blocks building is used for offices, classroom, storage areas with metal gates, dormitory, kitchen area, vault, and a large assembly hall in the middle of the structure. In addition, it has a FIGNA store. Also, the property has paved areas, parking facilities, fences, and a guardhouse.

2. SERVICES

2.1. DESCRIBE IN GENERAL SERVICE TO BE PERFORMED

The services in this scope of work are intended for the rehabilitation of all damages received during Hurricane María in the sites included and as described in the Damage, Description and Dimensions (DDD) Report generated by FEMA.

Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up and completion of the work.

2.2. ATTACHMENTS

- 2.2.1. Refer to **EXHIBIT A** Site Plans
- 2.2.2. Refer to **EXHIBIT B** Floor Plans
- 2.2.3. Refer to **EXHIBIT C** Tasks Description
- 2.2.4. Refer to **EXHIBIT D** Photos
- 2.2.5. Refer to **EXHIBIT E** Lead Based Paint Report
- 2.2.6. Refer to **EXHIBIT F** Asbestos Containing Materials Report
- 2.2.7. Refer to **EXHIBIT G** PRARNG Environmental Policy
- 2.2.8. Refer to **EXHIBIT H** Technical Specifications
- 2.2.9. Refer to **EXHIBIT I** Submittal Log

3. STAFF REQUIREMENTS

Contractor shall supervise and direct the work completely and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the contract documents. Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.

The Contractor shall employ a competent licensed and collegiate architect or engineer, as the Project Manager, and necessary assistants to direct the work. These assistants shall be in attendance at the project site at all times during the prosecution of the work. The Project Manager shall be satisfactory to the PRARNG or his representatives and shall not change except with the consent of the PRARNG, unless the Project Manager proves to be unsatisfactory to the Contractor (and Contractor gives PRARNG written notice of the specific reason for removal as Project Manager) or ceases to be in Contractor's employ.

The Project Manager will be the Contractor's representative at the Site and shall have authority to act on behalf of the Contractor. The Contractor, prior to the start of the project, will inform the PRNG the name, authority and responsibilities of the Project Manager and/or Superintendent. All communications given or received from the Project Manager shall be binding on Contractor.

The Contractor is responsible for the quality of all material and workmanship furnished in the construction of the Project.

4. TASKS DESCRIPTION: See EXHIBIT C for details of the task description.

4.1 Additional Notes

- a. All removed A/C equipment should be packed and delivered to Parada 3-1/2, Puerta de Tierra, San Juan. The removed components (air handling units, condensing units, refrigerant pipes, etc.) should be identified, placed in a wood pallet and wrap with heavy duty (90 gauge) stretch packaging film. The Contractor is responsible of providing a certification (Form CTRA-2005-2 from "Colegio de Técnicos de Refrigeración y Aire Acondicionado de Puerto Rico") for each unit removed and a certification for each new unit installed.
- b. For exterior paint work the following procedure should be implemented: first clean the surface thoroughly using pressure-wash, remove any loose paint, apply primer, apply first coat of paint to match existing color and then apply second coat of paint to match existing color.
- c. For interior paint work the following procedure should be implemented: first, clean the surface thoroughly, remove any loose paint, apply primer, apply first coat of paint to match existing color and then apply second coat of paint to match existing color.
- d. For small cracks (less than ¼ inch wide) repairs in a concrete wall the following procedure should be implemented: first, scrub the crack clean of any loose concrete, paint or old filler using a wire brush. Remove all dust and debris with a vacuum. Apply the concrete caulk or liquid filler over the crack as directed by the manufacturer. Add texture to the patched area before it dries to match existing wall texture. Paint over the patched area with primer and two coats of paint to match existing color.
For larger cracks (more than ¼ inch wide) repairs in a concrete wall the following procedure should be implemented: first, widen the crack using a chisel and hammer to a minimum of ¼ inch and break away any deteriorating concrete (undercut the sides of the crack to give it an inverted "V" shape). Scrub the crack clean of any loose concrete, paint or old filler using a wire brush. Remove all dust and debris with a vacuum. Apply the joint compound over the crack as directed by the manufacturer. Add texture to the patched area before it dries to match existing wall texture. Paint over the patched area with primer and two coats of paint to match existing color.
- e. For the installation of windows, the following procedure should be implemented: remove and discard the existing window. Install the new window as per manufacturer's instructions. Repair window sill as needed. Apply sealant around the frame joint on both exterior and interior sides. If necessary, paint impacted areas to match existing color. All windows have to include new hardware.
- f. For the installation of acoustic tiles, the following procedure should be implemented: remove and discard existing acoustic tiles. Install new acoustic tile as directed by manufacturer's instructions.
- g. For the installation of electrical fixtures, the following procedure should be implemented: remove and discard existing electrical fixture. Install the new electrical fixture with the necessary connections needed for it to be functional.
- h. For the construction of the training class shed (metal roof structure), the following procedure should be implemented: remove and discard the existing metal structure. Install the new sheet metal roof panels including its structural frame. The structure has to be able to support 20 pounds per square feet with the necessary anchoring system. A shop drawing must be submitted for the approval of the PRARNG before the installation.
- i. For the installation of chain link fence and gate, the following procedure should be implemented: remove and discard existing chain link fence and gate. Install new chain link fence and gate. The typical spacing between line posts will be 8 feet, the posts will be buried 3 ft deep and the dimensions of the posts will be 3-inch diameter.
- j. For the rehabilitation of the existing earth type swale, the following procedure should be implemented: remove trash, debris and all vegetative material from all parts of the swale.

Remove any accumulation of sediments along the swale and restore grading assuring adequate drainage. Machinery used for cleaning and grading should not be driven over the swale site since compaction of soil is likely to occur. The swale site should be protected from storm water runoff that will cause erosion and sedimentation during construction. Final grading and planting should not occur until the adjoining areas draining into the swale are stabilized. Any accumulation of sediments that does occur must be removed during the final stages of grading. The bottom should be raked to produce a highly porous surface. Install an erosion control matting or blanketing to stabilize soil during establishment of vegetation. As a final step, plant the selected vegetation and continue to water the vegetation as recommended. Add appropriate types of fertilizer and apply at prescribed rate to encourage rapid growth. If selected grass for swale is not performing, select and plant a new grass.

- k. For the installation of equipment, the following procedure should be implemented: remove and discard existing equipment. Install the new equipment with the necessary connections needed for it to be functional.
- l. All dimensions shall be field verify by the contractor during the site visit, before submitting the cost proposal.
- m. The contracted company, if necessary, should provide dumpsters for the disposition of removed materials and garbage that generates as part of the work performed. It is not authorized to use the dumpsters from the PRARNG or inside PRNG facilities. The maintenance services for the dumpster have to be provided by the contractor during the operational hours stipulated at the contract.
- n. All materials and equipment incorporated into the work shall be as specified or, if not specified, shall be of good quality and new. Contractor has to comply with the Buy American Act and provide evidence of compliance.

4.2 Meetings: The Contractor will attend regular meetings scheduled weekly or as needed to inform of the construction progress. Key personnel, such as the project manager and PRARNG representatives, will be in attendance to discuss and resolve progress and issues. Meeting minutes will be documented, published, and distributed within 7 business days after the meeting by the Owner or designated party and will serve as the progress reports for the project.

5.0 **DELIVERABLES** - The key deliverables to be provided include, but are not limited to, the following:

5.1 Preconstruction

- Project Schedule: Progress schedule shall present a practical plan to complete the work within the contract time, and shall convey the Contractor's intent as to the manner of prosecuting the progress of the work. The project schedule shall be computer produced using the Critical Path Method ("CPM") format. The schedule shall be computer generated utilizing an Owner approved project scheduling software such as Primavera, Microsoft Project or Sure Track (Refer to Uniform General Conditions Section 6.4.3 for details). The progress schedule has to be submitted during preconstruction for the evaluation and approval of a representative of PRARNG. Two (2) hard copies and one (1) digital pdf format (CD) copy should be submitted.
- Safety Plan: The selected contractor should provide a safety plan considering all risks that could be present at the different work activities and the measurements to be taken for mitigation or elimination of this risks. The contracted company should submit their safety plan for the evaluation process and final approval by the PRARNG before its

implementation and monitoring. The safety plan must include protocols for prevention and mitigation of COVID-19 at the work place. Two (2) hard copies and one (1) digital pdf format (CD) copy should be submitted.

- List of personnel and vehicles: A list of all the personnel included in the developing of the services will be provided, and a list with the information of the official vehicles that will enter PRARNG installations. Also, PRARNG will performed a police record check (DD Form 369) to all of the company's personnel before performing any work inside the military installation.
- Security/Anti-Terrorism/Force Protection:
All personnel working on site must comply with the DD Form 369 and the AT Level 1 training before performing any work inside the military installation.
 - AT Level I training, all awarded Contractor's personnel, to include subcontractor personnel, requiring access PRARNG installations, facilities and controlled access areas shall complete AT Level I awareness training within fourteen (14) calendar days after contract start date or effective date of incorporation of these requirements into the contract, whichever is applicable. The awarded Bidder shall submit certificates of completion for each affected Contractor's personnel and subcontractor's personnel to the Contracting Officer Representative (COR) within seven (7) calendar days after completion of training by all personnel. AT Level I awareness training is available at the following website: <https://jko.jten.mil/courses/at1/launge.html>.
 - Access and general protection/security policy and procedures. Awarded Bidder and all associated subcontractor's personnel shall provide all information required for background checks to meet installation access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Awarded Bidder workforce must comply with all personal identity verification requirements (FAR clause 52.204-9, Personal Identify Verification of Contractor Personnel) as directed by DoD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facilities or installation change, the Government may require changes in contractor security matters or processes.
 - Awarded Bidder and all associated sub-contractor's personnel shall comply with all standards and policies for all PRNG installations and facilities to include access and local security policies and procedures (provided by government representative). This applies for contractors that do not require CAC but require access to a DoD facilities or installations.
- Schedule of Values: The Contractor should submit a copy of the schedule of values for the evaluation and approval of a representative of PRARNG. Two (2) hard copies and one (1) digital pdf format (CD) copy should be submitted.
- Photograph Set: A complete set of photographs in color shall be provided by the Contractor for the existing conditions of all areas that will be impacted before any work is performed. These photos should be identified in a floor plan. Two (2) hard copies and one (1) digital pdf format (CD) copy should be submitted. The use of drones is prohibited as well as the distribution of all photos of the PRNG facilities. Photos will be used only to show the work performed and progress.

5.2 Construction

- Schedule of Values: The Contractor should submit monthly a copy of the schedule of values for the evaluation and approval of a representative of PRARNG. Three (3) hard copies and two (2) digital pdf format (CD) copies should be submitted. The schedule of values should enclose photos as evidence of the work performed during the given period.
- Project Schedule Updates: The project schedule shall be updated monthly and submitted for evaluation and approval of a representative of PRARNG. Two (2) hard copies and one (1) digital pdf format (CD) copy should be submitted.
- Submittals for Material and Equipment: The Contractor shall submit all submittals for approval of materials, shop drawings and samples to the Owner's representative (Refer to Uniform General Conditions Section 6.5 for details). Two (2) hard copies and one (1) digital pdf format (CD) copy should be submitted. Submittals should be approved before the installation of any given material or equipment. If any material or equipment is installed without having an approved submittal, the owner will not pay the given work.
- Waste Disposal: During the progress of the work, Contractor shall keep the site and other areas free from excessive accumulations of waste materials, rubbish and other debris caused by his operations on the site. Removal and disposal of such waste materials, rubbish and other debris shall conform to applicable Laws and Regulations. Waste disposal manifests shall be submitted to the PRARNG.

5.3 Closeout

- Prior to Substantial Completion of the work, Contractor shall clean the site and make it ready for utilization by Owner.
- For the project closeout, the Contractor shall submit two (2) binders each with a hard copy and two (2) CD/DVD digital pdf format copies that includes the following documents: all approved submittals, RFI, meeting minutes, project schedules and schedule of values generated during the project. This information will be part of the required documents for the last payment. Contractor shall maintain project document records for five (5) years beyond date of completion. Contractor has to comply with the Uniform General Conditions for Public Works.

6.0 **SCHEDULE**: The following schedule shall be adhered to after award of the Contract. The development/performance times specified below establish the document delivery date(s).

Proposed Schedule

Contract kick off meeting	NTP+7 days
Administrative documentation (due)	NTP + 60
Preconstruction Submittals (due)	NTP + 30
Construction Submittals (due)	NTP + 45
Period of Performance	NTP + 270
Closeout	NTP+300

7.0 CRITERIA

- a. FEMA Public Assistance Program and Policy Guide. Verify with program Managers, latest applicable version. Refer to the https://www.fema.gov/sites/default/files/2020-06/fema_public-assistance-program-and-policy-guide_v4_6-1-2020.pdf
- b. International Building Code (IBC) 2018 or latest version
- c. Puerto Rico Building Code (PRBC) 2019

8.0 CONTRACT TERM

8.1 The Contractor shall have 270 days to complete the construction activities.

8.2 The Proposer shall be responsible for completing the activities outlined in this Scope of Work during this period.

End

EXHIBIT A: Site location

Ceiba Readiness Center

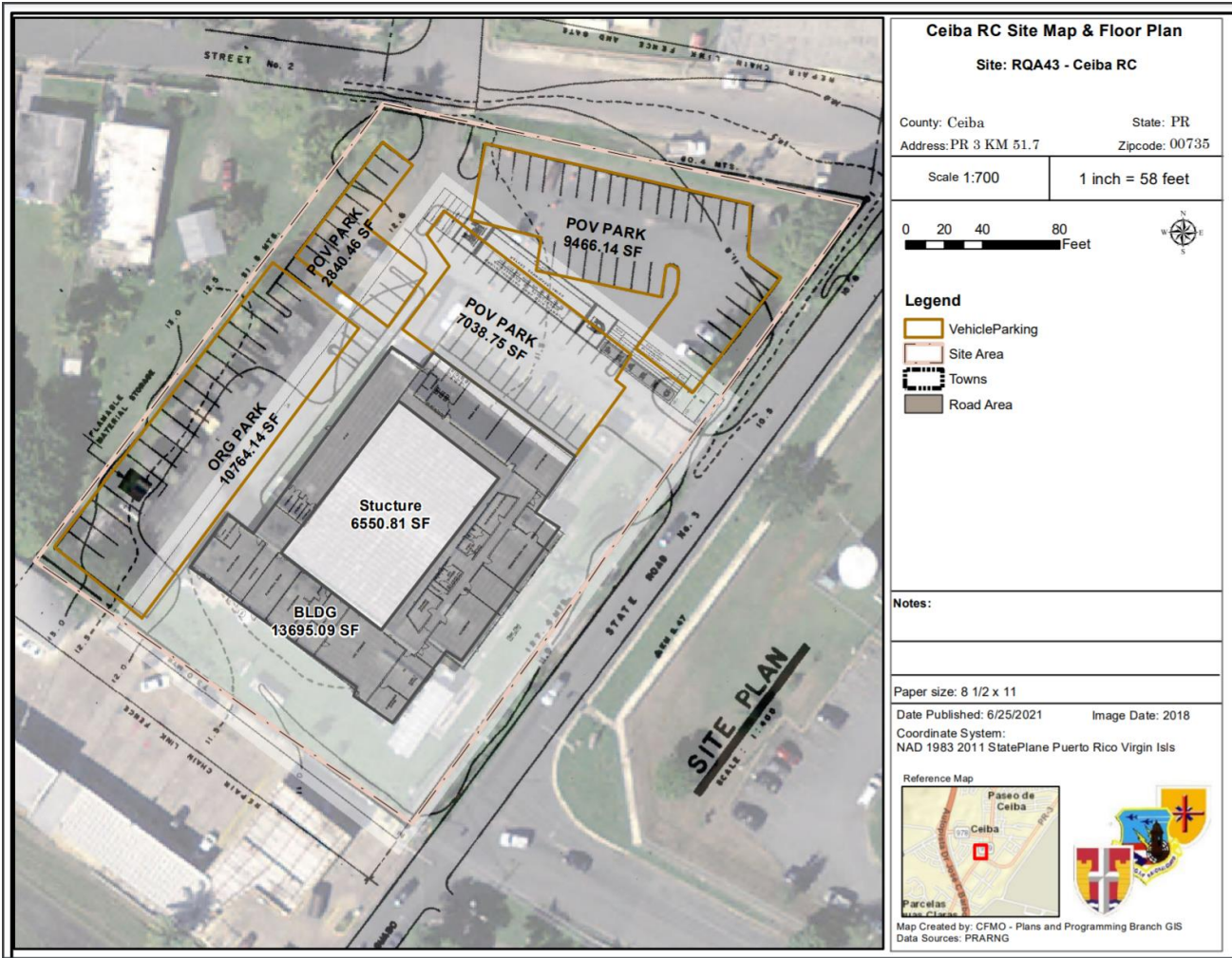


EXHIBIT B: Floor Plan

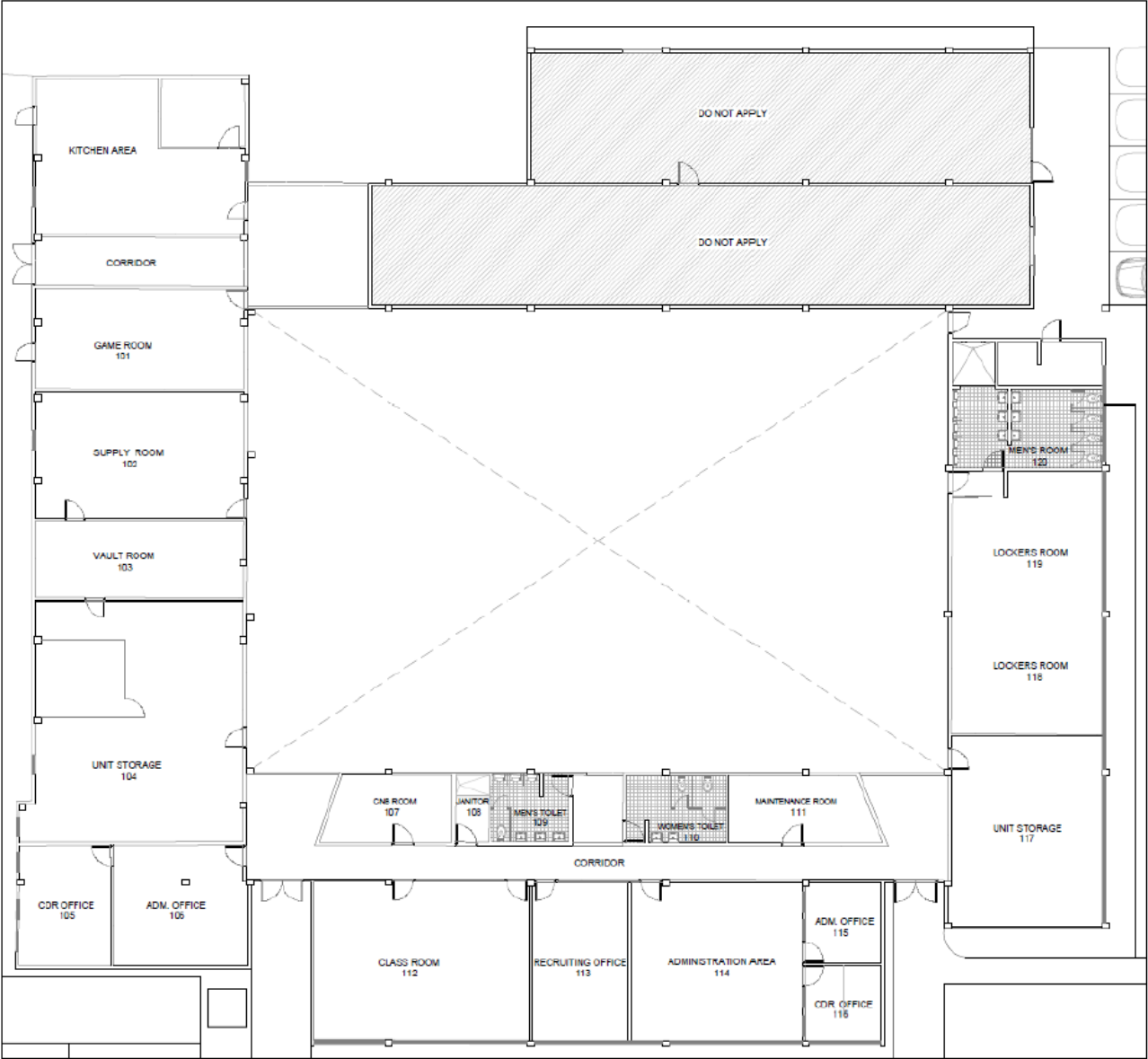


EXHIBIT C: Tasks Description

Ceiba (Pueblo) Readiness Center

The Proposer will be responsible for performing the following tasks:

Main Building

Adm. Office 114:

1. Remove and replace in-kind 90 LF of wood pine 1 IN x 6 IN wall base
2. Remove and replace in-kind 403 SF of acoustical ceilings (4 FT long x 2 FT wide)
 - *Hazard Mitigation Proposal (HMP): Replace 403 SF of acoustical ceilings with water resistance units (4 FT long x 2 FT wide)*
3. Prepare and paint in-kind 672 SF of wall paint (84 FT long x 8 FT high)
 - *HMP: Apply 672 SF of a secondary primer layer to wall paint (84 FT long x 8 FT high)*
4. Remove and replace in-kind 8 each of fluorescent lighting fixtures (4 FT long x 2 FT wide)
5. Remove and replace in-kind 120 LF of 3/4 IN EMT conduit electrical pipe
6. Remove and replace in-kind 360 LF of #12 THHN electrical wire
7. Remove and replace in-kind 8 each of 4 IN x 1-1/2 IN octagonal electrical box and cover
8. Remove and replace in-kind 4 each of 20A-125V duplex receptacle
9. Remove and replace in-kind 48 LF of 1/2 IN flexible metal electrical conduit

Adm. Office 115:

10. Remove and replace in-kind 96 SF of gypsum wall (8 FT long x 12 FT high)
 - *HMP: Replace 96 SF of gypsum wallboard with water resistance gypsum (8 FT long x 12 FT high)*
11. Remove and replace in-kind 47 LF of 6 in. rubber resilient baseboard
12. Remove and replace in-kind 139 SF of acoustical ceilings (4 FT long x 2 FT wide)
 - *HMP: Replace 139 SF of acoustical ceilings with water resistance units (4 FT long x 2 FT wide)*
13. Prepare and paint in-kind 376 SF of wall paint (47 FT long x 8 FT high)
14. Remove and replace in-kind 2 each of fluorescent lighting fixtures (4 FT long x 2 FT wide)
15. Remove and replace in-kind 30 LF of 3/4 IN EMT conduit electrical pipe
16. Remove and replace in-kind 90 LF of #12 THHN electrical wire
17. Remove and replace in-kind 2 each of 4 IN x 1-1/2 IN octagonal electrical box and cover
18. Remove and replace in-kind 3 each of 20A-125V duplex receptacle
19. Remove and replace in-kind 12 LF of 1/2 IN flexible metal electrical conduit

Assembly Hall

20. Prepare and paint in-kind 7,080 SF of interior wall paint
 - *HMP: Apply 7,080 SF of a secondary primer layer to wall paint*

CDR Office 116

21. Remove and replace in-kind 96 SF of gypsum wall (12 FT long x 8 FT high)
 - *HMP: Replace 96 SF of gypsum wallboard with water resistance gypsum*
22. Remove and replace in-kind 43 LF of 6 in. rubber resilient baseboard
23. Remove and replace in-kind 131 SF of acoustical ceilings (4 FT long x 2 FT wide)
 - *HMP: Replace 131 SF of acoustical ceilings with water resistance units (4 FT long x 2 FT wide)*
24. Prepare and paint in-kind 344 SF of wall paint (43 FT long x 8 FT high)
 - *HMP: Apply 344 SF of a secondary primer layer to wall paint (43 FT long x 8 FT high)*
25. Remove and replace in-kind 55 SF of vertical 3 IN strip blinds (11 FT long x 5 FT high)
26. Remove and replace in-kind 2 each of fluorescent lighting fixtures (4 FT long x 2 FT wide)
27. Remove and replace in-kind 30 LF of 3/4 IN EMT conduit electrical pipe
28. Remove and replace in-kind 90 LF of #12 THHN electrical wire
29. Remove and replace in-kind 2 each of 4 IN x 1-1/2 IN octagonal electrical box and cover

- 30. Remove and replace in-kind 3 each of 20A-125V duplex receptacle
- 31. Remove and replace in-kind 1 each of communication cabinet (35 IN depth x 24 IN wide x 76 IN high)
- 32. Remove and replace in-kind 12 LF of 1/2 IN flexible metal electrical conduit

Class Room 112

- 33. Remove and replace in-kind 790 SF of vinyl type floor tiles (12 IN x 12 IN)
 - *HMP: Replace regular adhesive of 790 SF with waterproof version for vinyl type floor tiles (12 IN x 12 IN)*
- 34. Remove and replace in-kind 108 LF of 6 in. rubber resilient baseboard
- 35. Remove and replace in-kind 790 SF of acoustical ceilings (4 FT long x 2 FT wide)
 - *HMP: Replace 790 SF of acoustical ceilings with water resistance units (4 FT long x 2 FT wide)*
- 36. Prepare and paint in-kind 864 SF of wall paint (108 FT long x 8 FT high)
 - *HMP: Apply 864 SF of a secondary primer layer of wall paint (108 FT long x 8 FT high)*
- 37. Remove and replace in-kind 33 SF of vertical 3 IN strip blinds (5 FT long x 6.6 FT high)
- 38. Remove and replace in-kind 1 each of similar or equal mini split comfort breeze 36k Btu/CMB-361
 - *HMP: Anchoring system for 1 each mini split 36k Btu*
 - **See additional notes for details on handling existing and new equipment.**
- 39. Remove and replace in-kind 4 each of fluorescent lighting fixtures (4 FT long x 2 FT wide)
- 40. Remove and replace in-kind 120 LF of 3/4 IN EMT conduit electrical pipe
- 41. Remove and replace in-kind 360 LF of #12 THHN electrical wire
- 42. Remove and replace in-kind 8 each of 4 IN x 1-1/2 IN octagonal electrical box and cover
- 43. Remove and replace in-kind 7 each of 20A-125V duplex receptacle
- 44. Remove and replace in-kind 48 LF of 1/2 IN flexible metal electrical conduit

Commander Office 105

- 45. Remove and replace in-kind 2 each single hung standard glazed glass window (3 FT x 3 FT)
- 46. Remove and replace in-kind 252 SF of vinyl type floor tiles (12 IN x 12 IN)
 - *HMP: Replace 252 SF of regular adhesive with waterproof version for vinyl type floor tiles (12 IN x 12 IN)*
- 47. Remove and replace in-kind 61 LF of 6 in. rubber resilient baseboard
- 48. Prepare and paint in-kind 488 SF of wall paint (61 FT long x 8 FT high)
 - *HMP: Apply 488 SF of a secondary primer layer to wall paint (61 FT long x 8 FT high)*

East Side (Admin Area 114 & Office 115)

- 49. Remove and replace in-kind 1 each of similar or equal Central Cooling Air Conditioner Trane Model #4TCC3036A1000AB
 - *HMP: Anchoring system for 1 each of similar or equal Central Cooling Air Conditioner Trane Model #4TCC3036A1000AB*
 - **See additional notes for details on handling existing and new equipment.**

East Side (Commander Office 105)

- 50. Remove and replace in-kind 1 each of similar or equal Mini Split AC Unit – Comfort Breeze - Capacity 24,000 Btu
 - *HMP: Anchoring system for 1 each of similar or equal Mini Split AC Unit – Comfort Breeze - Capacity 24,000 Btu*
 - **See additional notes for details on handling existing and new equipment.**

Guard House

- 51. Prepare and paint in-kind 320 SF of interior Wall/Ceiling Paint (32 FT long x 10 FT high)

- *HMP: Apply 320 SF of a Secondary Primer Layer to Wall/Ceiling Paint (32 FT long x 10 FT high)*

52. Remove and replace in-kind 4 each of High-Pressure Sodium, 70 HPS similar or equal to Lithonia VRC Exterior Fixtures Canopy Lights (1 FT long x 1 FT wide)

Janitor/Women Shower 108

53. Prepare and paint in-kind 400 SF of Wall Paint (50 FT long x 8 FT high)
 - *HMP: Apply 400 SF of a Secondary Primer Layer to Wall Paint (50 FT long x 8 FT high)*
54. Remove and replace in-kind 1 each of Fluorescent Lighting Fixtures (4 FT long x 1.5 FT wide)
55. Remove and replace in-kind 15 LF of 3/4 IN EMT Conduit Electrical Pipe
56. Remove and replace in-kind 45 LF of #12 THHN Electrical Wire
57. Remove and replace in-kind 1 each of 4 IN x 1-1/2 IN Octagonal Electrical Box and Cover
58. Remove and replace in-kind 6 LF of 1/2 IN Flexible Metal Electrical Conduit

Main Corridor

59. Remove and replace in-kind 808 SF of Vinyl Type Floor Tiles (12 IN x 12 IN)
 - *HMP: Replace 808 SF of regular adhesive with waterproof version for Vinyl Type Floor Tiles (12 IN x 12 IN)*
60. Remove and replace in-kind 224 LF of 6 in. Rubber Resilient Baseboard
61. Remove and replace in-kind 808 SF of Acoustical Ceilings (4 FT long x 2 FT wide)
 - *HMP: Replace 808 SF of Acoustical Ceilings with Water Resistance Units (4 FT long x 2 FT wide)*
62. Prepare and paint in-kind 1,792 SF of Wall Paint (224 FT long x 8 FT high)
 - *HMP: Apply 1,792 SF of Secondary Primer Layer to Wall Paint (224 FT long x 8 FT high)*
63. Remove and replace in-kind 12 each of Fluorescent Lighting Fixtures (4 FT long x 2 FT wide) with four 32 watts lamps
64. Remove and replace in-kind 180 LF of 3/4 IN EMT Conduit Electrical Pipe
65. Remove and replace in-kind 540 LF of #12 THHN Electrical Wire
66. Remove and replace in-kind 12 each of 4 IN x 1-1/2 IN Octagonal Electrical Box and Cover
67. Remove and replace in-kind 72 LF of 1/2 IN Flexible Metal Electrical Conduit

Maintenance Room 111

68. Prepare and paint in-kind 640 SF of Wall Paint (64 FT long x 10 FT high)
 - *HMP: Apply 640 SF of Secondary Primer Layer to Wall Paint (64 FT long x 10 FT high)*
69. Remove and replace in-kind 4 each of Fluorescent Lighting Fixtures (4 FT long x 2 FT wide)
70. Remove and replace in-kind 60 LF of 3/4 IN EMT Conduit Electrical Pipe
71. Remove and replace in-kind 180 LF of #12 THHN Electrical Wire
72. Remove and replace in-kind 4 each of 4 IN x 1-1/2 IN Octagonal Electrical Box and Cover
73. Remove and replace in-kind 1 each of 20A-125V Duplex Receptacle
74. Remove and replace in-kind 36 LF of 1/2 IN Flexible Metal Electrical Conduit
75. Remove and replace in-kind 1 each of 100 Amps 120/208V - 12 poles Panelboard #1 (L-P-A)
76. Remove and replace in-kind 1 each of 100 Amps 120/208V - 18 poles Panelboard #2 (L-P-E-A)
77. Remove and replace in-kind 1 each of 100 Amps 120/208V - 22 poles Panelboard #3 (A-P-A)

NBC Room 107

78. Remove and replace in-kind 187 SF of Acoustical Ceilings (4 FT long x 2 FT wide)
 - *HMP: Replace 187 SF of Acoustical Ceilings with Water Resistance Units (4 FT long x 2 FT wide)*
79. Prepare and paint in-kind 424 SF of Wall Paint (53 FT long x 8 FT high)

- *HMP: Apply 424 SF of Secondary Primer Layer to Wall Paint (53 FT long x 8 FT high)*
- 80. Remove and replace in-kind 2 each of Fluorescent Lighting Fixtures (4 FT long x 2 FT wide)
- 81. Remove and replace in-kind 30 LF of 3/4 IN EMT Conduit Electrical Pipe
- 82. Remove and replace in-kind 90 LF of #12 THHN Electrical Wire
- 83. Remove and replace in-kind 2 each of 4 IN x 1-1/2 IN Octagonal Electrical Box and Cover
- 84. Remove and replace in-kind 24 LF of 1/2 IN Flexible Metal Electrical Conduit

Recruiting Office 113

- 85. Remove and replace in-kind 35 SF of Acoustical Ceilings (4 FT long x 2 FT wide)
 - *HMP: Replace 35 SF of Acoustical Ceilings with Water Resistance Units (4 FT long x 2 FT wide)*
- 86. Prepare and paint in-kind 568 SF of Wall Paint (71 FT long x 8 FT high)
 - *HMP: Apply 568 SF of Secondary Primer Layer to Wall Paint (71 FT long x 8 FT high)*
- 87. Remove and replace in-kind 1 each of AC Unit Window Type 18k Btu, similar or equal to GE Model ACV18DCG1
 - *HMP: Anchor A/C Unit of 18k BTU to non-corrosive hurricane metal wall bracket*
 - **See additional notes for details on handling existing and new equipment.**
- 88. Remove and replace in-kind 4 each of Fluorescent Lighting Fixtures (4 FT long x 2 FT wide)
- 89. Remove and replace in-kind 60 LF of 3/4 IN EMT Conduit Electrical Pipe
- 90. Remove and replace in-kind 180 LF of #12 THHN Electrical Wire
- 91. Remove and replace in-kind 4 each of 4 IN x 1-1/2 IN Octagonal Electrical Box and Cover
- 92. Remove and replace in-kind 6 each of 20A-125V Duplex Receptacle
- 93. Remove and replace in-kind 24 LF of 1/2 IN Flexible Metal Electrical Conduit

Rooms 117-120

- 94. Remove and replace in-kind 19 LF of Aluminum Jalousie Window Weatherstrip (29 each window)
- 95. Prepare and paint in-kind 221 SF of Aluminum Jalousie Window Paint (32 IN wide x 34 IN high) - 29 each window

Supply Office 106

- 96. Remove and replace in-kind 367 SF of Vinyl Type Floor Tiles (12 IN x 12 IN)
 - *HMP: Replace 367 SF of regular adhesive with waterproof version for Vinyl Type Floor Tiles (12 IN x 12 IN)*
- 97. Remove and replace in-kind 72 LF of 6 in. Rubber Resilient Baseboard
- 98. Remove and replace in-kind 367 SF of Acoustical Ceilings (4 FT long x 2 FT wide)
 - *HMP: Replace 367 SF of Acoustical Ceilings with Water Resistance Units (4 FT long x 2 FT wide)*
- 99. Prepare and paint in-kind 616 SF of Wall Paint (77 FT long x 8 FT high)
 - *HMP: Apply 616 SF of Secondary Primer Layer to Wall Paint (77 FT long x 8 FT high)*
- 100. Remove and replace in-kind 1 each of Mini Split 36k Btu AC Evaporator Unit
 - *HMP: Anchoring system for Mini Split 36k Btu AC Evaporator Unit*
 - **See additional notes for details on handling existing and new equipment.**

Training Class Shed

- 101. Remove and replace in-kind 660 SF of Sheet Metal Roofing (33 FT long x 20 FT wide)
 - *HMP: Add additional anchoring screws to 660 SF of sheet metal roofing (33 FT long x 20 FT wide) to improve the fastening patterns and uplift resistance*
- 102. Remove and replace in-kind 8 each of 12 FT Roof Structural Frame Square Tubing (4 IN x 4 IN x 3/8 IN)
- 103. Remove and replace in-kind 320 LF of Steel Beam C2 x 1.78 Channel

Storage Structure

- 104. Prepare and paint in-kind 473 SF of interior Wall/Ceiling Paint
 - *HMP: Apply 473 SF of Secondary Primer Layer to Wall/Ceiling Paint*

Building Exterior

- 105. Remove and replace in-kind 1 each of metal type rolling door (16.5 FT wide x 16.5 FT high)
 - *HMP: Reduce gauge of Metal Type Rolling Door (16.5 FT wide x 16.5 FT high) from 20 to 18 gauge*
- 106. Remove and replace in-kind 1 each of 700 GA plastic potable water tank
- 107. Remove and replace in-kind 1 each of Cistern similar or equal to Model C48B03B07 (GRD A.C. Smith Corp); storage capacity tank 600 GA; Cistern Pump: 1 HP, 115/230 V, 60 Hz
- 108. Remove and replace in-kind 1 each of Hydro-pneumatic tank

Roof (Class Room 112)

- 109. Remove and replace in-kind 1 each of Mini Split AC Unit 36k Btu similar or equal to Model Trane XL 14i 2TTX4030B1000AA
 - *HMP: Add roof top anchoring system for Mini Split AC Unit 36k Btu*
 - **See additional notes for details on handling existing and new equipment.**

Roof (North Side/Men Room)

- 110. Remove and replace in-kind 1 each of Stainless Steel Exhaust Fan with Disconnect Switch
 - *HMP: Anchoring system for Stainless Steel Exhaust Fan with Disconnect Switch*

East Side (Exterior)

- 111. Remove and replace in-kind 30 LF of aluminum jalousie window weatherstrip (40 each window)
- 112. Prepare and paint in-kind 520 SF (40 each window) of Aluminum Jalousie Window Paint (30 IN wide x 62 IN high)

West Side (Exterior)

- 113. Remove and replace in-kind 23 LF of Aluminum Jalousie Window Weatherstrip (32 each window)
- 114. Prepare and paint in-kind 341 SF of Aluminum Jalousie Window Paint (34 IN wide x 45 IN high) - 32 each window

North & South Sides (Exterior)

- 115. Remove and replace in-kind 34 LF (44 each window) of Aluminum Jalousie Window Weatherstrip
- 116. Prepare and paint in-kind 625 SF of Aluminum Jalousie Window Paint (34 IN wide x 60 IN high) - 44 each window

South Side (Kitchen 100) - Exterior

- 117. Remove and replace in-kind 1 each of exterior Exhaust Fan similar or equal to Loren Cook Company Model 165R5B
 - *HMP: Anchoring system for Exhaust Fan*

South Side (Supply Room 102) - Exterior

- 118. Remove and replace in-kind 1 each of Single Hung Standard Glazed Glass Window (3 FT x 3 FT)
- 119. Remove and replace in-kind 1 each of Exhaust Fan similar or equal to Marathon Electric Fan Model 6VF48S17D1216E
 - *HMP: Anchoring system for Exhaust Fan*

South Side (Unit Storage 104) - Exterior

- 120. Remove and replace in-kind 1 each of Exhaust Fan similar or equal to Power Line Model 122DEE7A
 - *HMP: Anchoring system for Exhaust Fan*

Site

- 121. Remove and replace in-kind 720 SF of Chain Link Perimeter Fence (120 FT long x 6 FT high)

- *HMP: Chain Link Perimeter Fence (120 FT long x 6 FT high) - reduce the typical spacing between line posts from 10 feet to 8 feet, bury the posts at 3 ft deep instead of 2 ft deep, change the dimensions of the posts from 2-inch diameter to 3-inch diameter.*
- 122. Remove and replace in-kind 160 SF of Chain Link Fence Gate (20 FT long x 8 FT high)
 - *HMP: Chain Link Fence Gate (20 FT long x 8 FT high) - reduce the typical spacing between line posts from 10 feet to 8 feet, bury the posts at 3 ft deep instead of 2 ft deep, change the dimensions of the posts from 2-inch diameter to 3-inch diameter.*
- 123. Remove and replace 288 CF of (6 inches thick including 4 inches stone base fill and 2 inches asphalt topping) pavement, 115 FT long x 5 FT wide x 6 IN deep.
 - *HMP: After removal of 288 CF of (6 in. thick including 4 in. stone base fill and 2 in. asphalt topping) pavement and fill, 115 FT long x 5 FT wide x 6 IN deep, install geotextile under the surface to prevent future scour and erosion.*
- 124. Remove and replace in-kind 680 SF of Earth Type Swale (170 FT long x 4 FT wide)

NOTE: The Lead Inspection Report is included as part of **Exhibit E** and the Asbestos Inspection Report is included as part of **Exhibit F** for reference only. The lead and asbestos abatement are not part of this scope of work. The lead and asbestos abatement will be completed before any construction work is performed.

EXHIBIT D: Photos

Ceiba Readiness Center


	
Photo #1: Perimeter Chain Link Fence	Photo #2: Perimeter Chain Link Fence



Photo #3: Chain Link Fence Gate



Photo #4: Training Class Shed - Metal Roofing

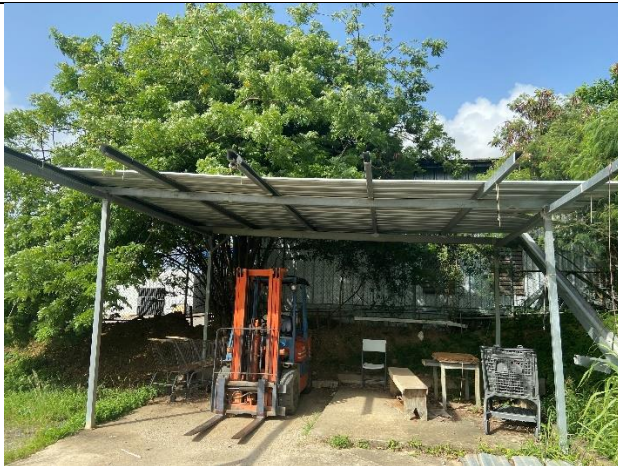


Photo #5: Training Class Shed - Metal Roofing



Photo #6: Training Class Shed - Metal Roofing



Photo #7: Storage Structure



Photo #8: Guard House



Photo #9: Stormwater Earth Swale



Photo #10: Jalousie Window Weatherstrip



Photo #11: Jalousie Window Weatherstrip



Photo #12: Exterior Jalousie Window Paint



Photo #13: Guard House Lightning Fixtures



Photo #14: Water Cistern & Hydro-Pneumatic Tank



Photo #15: Assembly Hall Wall Paint



Photo #16: Assembly Hall Wall Paint



Photo #17: Acoustic Ceiling



Photo #18: Acoustic Ceiling





Photo #19: Floor Vinyl Tiles



Photo #20: Rubber Resilient Baseboard



Photo #21: Fluorescent Lighting Fixture
(4 FT long x 2 FT wide)



Photo #22: Vertical Strip Blinds



Photo #23: Communication Cabinet



Photo #24: Administration Office A/C Ductwork



Photo #25: Administration Office Wall Paint
Deficiencies



Photo #26: Administration Area Affected
Receptacles



Photo #27: Recruiting Office Window Type A/C Unit



Photo #28: Classroom Acoustic Ceiling and Lighting Fixtures



Photo #29: Classroom Affected Receptacle



Photo #30: Classroom Affected Split Unit



Photo #31: Maintenance Room Affected
Panel Boards



Photo #32: NBC Room Acoustic Ceiling



Photo #33: Supply Office Vinyl Tiles



Photo #34: Supply Office Rubber Resilient
Baseboard



Photo #35: Supply Office Mini Split Unit



Photo #36: Commander Office Damaged Windows



Photo #37: Unit Storage Exhaust Fan



Photo #38: Supply Room Damaged Window


	
Photo #39: Kitchen Exhaust Fan	

EXHIBIT E:

EXHIBIT E: Lead Based Paint Inspection Report



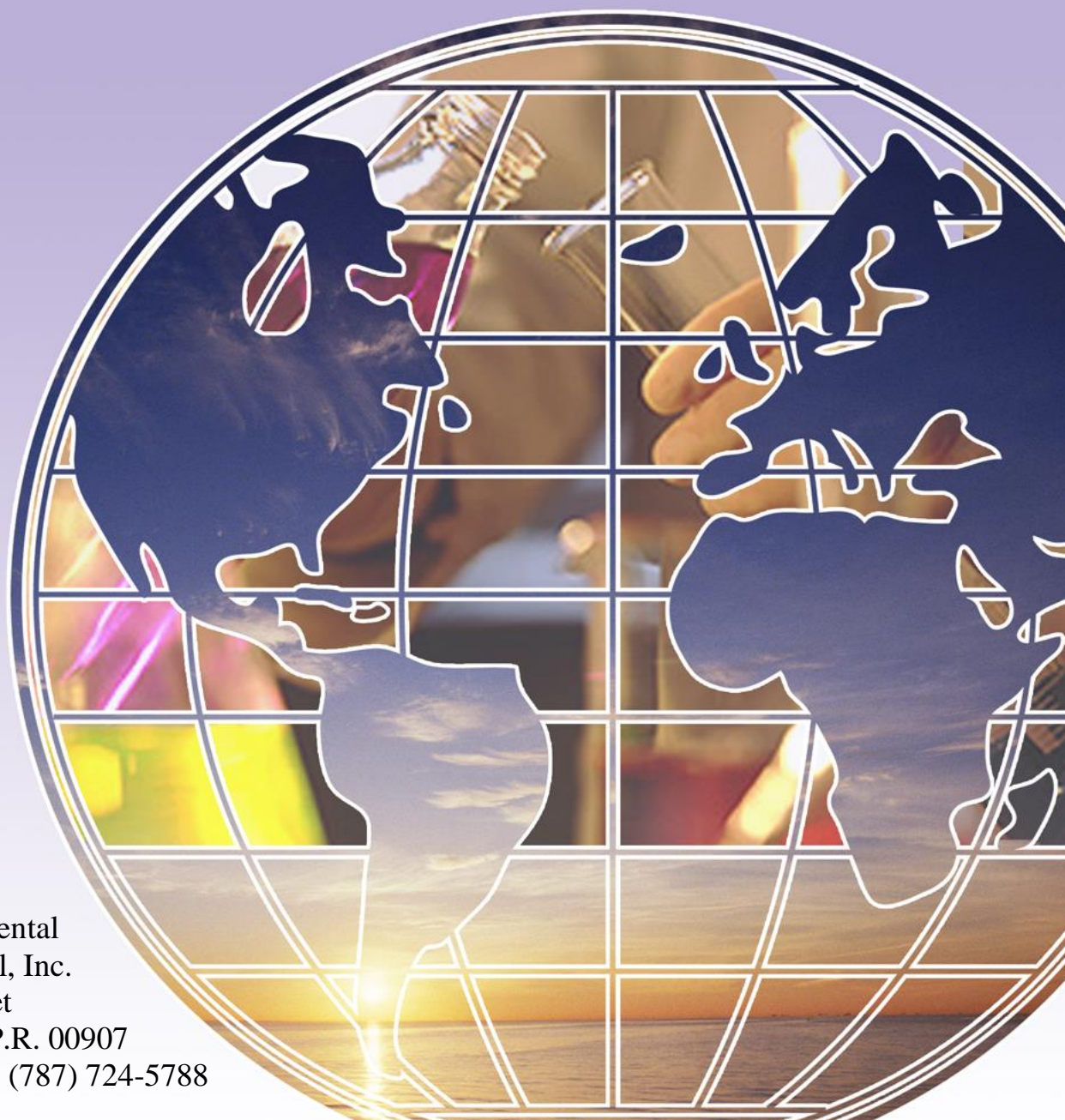
**LEAD BASED PAINT SURVEY
FOR
CEIBA READINESS CENTER
CEIBA, PUERTO RICO**

Prepared For:
National Guard

Oct 2021

Prepared By:

Analytical Environmental
Services International, Inc.
611 Monserrate Street
2nd Floor, Santurce, P.R. 00907
(787) 722-0220 / Fax (787) 724-5788



LEAD



TABLE OF CONTENTS

I. SUMMARY

1.0 INTRODUCTION

2.0 TESTING PROCEDURES

3.0 LEAD BASED PAINT TESTING METHODOLOGY

4.0 RESULTS

5.0 CONCLUSIONS

APPENDIX I - AESI Credentials

APPENDIX II - XRF and Laboratory Data

APPENDIX III - Selective photos of LBP components

APPENDIX IV - Floor Plans with Functional Spaces and
Distribution of LBP components

I. SUMMARY

An environmental survey for Lead Based Painted (LBP) Components was conducted by AES International for Ceiba Readiness Center located in Ceiba, Puerto Rico.

The LBP investigation was conducted on 10/11/21 by Anthony Rivera, an DRNA certified lead inspector. The survey, performed with an XRF instrument manufactured by Heuresis, Model Pb200i, was conducted using HUD protocol of 2012.

The following components were found to be positive for LBP:

Ceiba RC

Maintenance & Storage				
Door Frame	Metal	Cream	18 ln.ft	
Women Bathroom				
Door Frame	Metal	Cream	18 ln.ft	
Sink	Ceramic	White	1 unit	
Toilet Valve	Metal	Chrome	2 units	
Men Bathroom				
Door	Metal	Cream	21 sq.ft	
Sink	Ceramic	White	2 units	
Toilet Valve	Metal	Chrome	1 unit	
Urinal Valve	Metal	Chrome	3 units	
Janitorial				
Door Frame	Metal	Cream	18 ln.ft	
Commander Office				
Wall C	Concrete	Cream	119 sq.ft approx.	
Unit Storage A				
Door Frame	Metal	Green	18 ln.ft	
Unit Storage B				
Door Frame	Metal	Green	18 ln.ft	
Vault				
Door Frame	Metal	Orange	18 ln.ft	
Door	Metal	Orange	21 sq.ft	

Electrical Room				
	Door Frame	Metal	Green	18 ln.ft
	Door Frame, Wall C	Metal	Green	18 ln.ft
Corridor B				
	Door Frame, Wall C	Metal	Green	18 ln.ft
Kitchen				
	Door Frame, Wall C	Metal	Green	18 ln.ft
Showers				
	Toilet Valve	Metal	Chrome	4 units
	Urinal Valve	Metal	Chrome	5 units
Unit Storage C				
	Door Frame	Metal	Green	18 ln.ft
Outside Storage				
	Door Frame	Metal	Green	18 ln.ft
Guardhouse A				
	Floor	Ceramic	Cream	49 sq.ft

If remodeling activities will be conducted in the nearest future, it is required to remove all LBP materials prior to performance of said activities.

1.0 INTRODUCTION

An environmental survey for Lead Based Painted (LBP) Components was conducted by AES International for Ceiba Readiness Center in Ceiba, Puerto Rico.

The LBP investigation was conducted on 10/11/21 by Anthony Rivera, an DRNA certified lead inspector. The survey, performed with an XRF instrument manufactured by Heuresis, Model Pb200i, was conducted using HUD protocol of 1997, revised in 2012. The results are presented herein.

2.0 TESTING PROCEDURES

The testing was performed with an XRF instrument manufactured by Heuresis, Model Pb200i. The selected mode allows reference to the abatement level set at 1.0 mg/cm². The results are reported at 95% confidence levels.

3.0 LEAD BASED PAINT TESTING METHODOLOGY

The hazard level of lead in paint has been determined by the department of Housing & Urban development as 1.0 mg/cm², as measured by XRF, or AAS (Atomic Absorption Spectroscopy), or 0.5% by weight (or 5000 ppm) as measured by AAS, or Inductive Coupled Plasma (ICP). The same level was adopted by EPA regulations published in 1992, under Title X.

The only lead-based paint testing protocol officially available at this time was published by HUD initially in 1990, revised in 1991 and finalized in 1995 (see above HUD reference). A revised chapter 7 was published in 1997 and finalized in 2012. In accordance to the new protocol, almost all surfaces present in the units have to be tested. The above guidelines were used to perform lead based-paint testing for this project.

The main steps involved in a multi-family inspection are:

1. Perform inventory of all testing combinations
2. Select painted area to be tested
3. Perform XRF testing (including calibration checks)
4. Collect and analyze paint chip samples, for inconclusive results.
5. Classify XRF and paint chips results
6. Review and evaluate the data
7. Report findings

AES International personnel classify each XRF lead reading as positive, negative, or inconclusive. This classification is based on manufacturer XRF performance characteristic sheet (PCS), for each substrate. Samples and/or additional readings are taken from inconclusive areas.

Calibration verification of the instrument was performed prior to beginning of daily task, when the instrument was turned on, and at the end of the day. The verification was conducted on a NIST

standard of 1.0 mg/cm². Acceptance criteria used was ± 0.3 mg/cm². The data for calibration verification is attached in Appendix II.

The structures were divided in room equivalents and labeled accordingly (see Appendix II). One testing combination of similar components and four walls were tested for each room equivalent.

The identification of tested walls is based on HUD guidelines as follow:

Wall A-entrance wall

Walls B, C, and D-sequential walls, clockwise from A.

At the completion of the testing, ten (10) surfaces were retested as to assess precision of the testing. Statistical calculations performed on test-retest results suggest that the results are within the tolerance limits and therefore acceptable.

4.0 RESULTS

4.1 Results of XRF inspection

The results of the tested components are shown in Appendix II. Three hundred and sixty-eight (368) XRF readings were taken. The exact distribution of the positive components is summarized in Table 1 (see also summary). Pictures of selective positive components are shown in Appendix III. A floor plan with distribution of LBP components is also shown (see Appendix IV).

5.0 CONCLUSIONS

An LBP survey was conducted for Ceiba Readiness Center in Ceiba, Puerto Rico. LBP components were detected. Some painted surfaces may contain levels of lead below 1.0 mg/cm², which could create lead dust, or lead contaminated soil hazards if the paint is turned into dust by abrasion, scraping, or sanding.

This report shall be kept by the owner and all future owners for the life of the buildings. A copy of the relevant report shall be given to each tenant, buyer or lessor, as to comply with federal requirements for disclosure under lead disclosure rule of 1996 (see also section 1018 of Title X). Reported results are valid for the day of testing indicated in the reports. According to DNRA the LBP study is valid for a period of five years.

The LBP survey relates to surfaces accessible and not covered by rigid barriers. Should any hidden surfaces or components be present, they must be assumed to be painted with LBP.



Anthony Rivera, DRNA Lead Inspector
Lic#: LBPI-34420-316

**Table 1. Summary of LBP Positive Components at Ceiba Readiness Center,
Ceiba, Puerto Rico.**

Structure	Room	Components	Substrate	Color	Quantity
<u>Ceiba RC</u>					
	Maintenance & Storage				
		Door Frame	Metal	Cream	18 ln.ft
	Women Bathroom				
		Door Frame	Metal	Cream	18 ln.ft
		Sink	Ceramic	White	1 unit
		Toilet Valve	Metal	Chrome	2 units
	Men Bathroom				
		Door	Metal	Cream	21 sq.ft
		Sink	Ceramic	White	2 units
		Toilet Valve	Metal	Chrome	1 unit
		Urinal Valve	Metal	Chrome	3 units
	Janitorial				
		Door Frame	Metal	Cream	18 ln.ft
	Commander Office				
		Wall C	Concrete	Cream	119 sq.ft approx.
	Unit Storage A				
		Door Frame	Metal	Green	18 ln.ft
	Unit Storage B				
		Door Frame	Metal	Green	18 ln.ft
	Vault				
		Door Frame	Metal	Orange	18 ln.ft
		Door	Metal	Orange	21 sq.ft
	Electrical Room				
		Door Frame	Metal	Green	18 ln.ft
		Door Frame, Wall C	Metal	Green	18 ln.ft
	Corridor B				
		Door Frame, Wall C	Metal	Green	18 ln.ft
	Kitchen				
		Door Frame, Wall C	Metal	Green	18 ln.ft
	Showers				
		Toilet Valve	Metal	Chrome	4 units
		Urinal Valve	Metal	Chrome	5 units
	Unit Storage C				
		Door Frame	Metal	Green	18 ln.ft
	Outside Storage				
		Door Frame	Metal	Green	18 ln.ft
	Guardhouse A				
		Floor	Ceramic	Cream	49 sq.ft

Appendix I





AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Analytical Environmental Services International, Inc.

611 Monserrate St. Suite 2 Santurce, PR 00907

Laboratory ID: LAP-102702

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS



INDUSTRIAL HYGIENE

Accreditation Expires: February 01, 2023



ENVIRONMENTAL LEAD

Accreditation Expires: February 01, 2023



ENVIRONMENTAL MICROBIOLOGY

Accreditation Expires:



FOOD

Accreditation Expires:



UNIQUE SCOPES

Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O Morton

Managing Director, AIHA Laboratory Accreditation Programs, LLC



GOBIERNO DE PUERTO RICO

Departamento de Recursos Naturales y Ambientales

Este certificado es otorgado a:

Analytical Environmental Services International

Por haber cumplido con los requisitos establecidos en el Capítulo VI, Regla 126 del Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo. Se le otorga esta certificación como **Empresa** para llevar a cabo actividades de Mitigación Pintura con base de plomo en la jurisdicción de Puerto Rico.

Número de Certificado

LBPF-04321-010

Fecha de emisión: Abril 6, 2021

Fecha de Expiración: Abril 5, 2022




José Roque Juliá
Jefe
División Desperdicios Tóxicos

Lead Inspector Credentials



Appendix II



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
1					Calibration	0.9	
2					Calibration	0.9	
3					Calibration	0.8	
4	Ceiba RC	Entrance Area	Metal	Brown	Door	0.0	
5	Ceiba RC	Entrance Area	Metal	Brown	Door Frame	-0.1	
6	Ceiba RC	Entrance Area	Concrete	Cream	Upper Wall A	0.0	
7	Ceiba RC	Entrance Area	Concrete	Green	Lower Wall A	0.0	
8	Ceiba RC	Entrance Area	Concrete	Cream	Upper Wall B	0.3	
9	Ceiba RC	Entrance Area	Concrete	Green	Lower Wall B	0.0	
10	Ceiba RC	Entrance Area	Concrete	Cream	Upper Wall D	0.1	
11	Ceiba RC	Entrance Area	Concrete	Green	Lower Wall D	0.1	
12	Ceiba RC	Corridor	Gypsum	Cream	Upper Wall B	0.0	
13	Ceiba RC	Corridor	Gypsum	Green	Lower Wall B	0.3	
14	Ceiba RC	Corridor	Concrete	Cream	Upper Wall D	0.1	
15	Ceiba RC	Corridor	Concrete	Green	Lower Wall D	0.0	
16	Ceiba RC	Maintenance & Storage	Metal	Cream	Door Frame	1.0	
17	Ceiba RC	Maintenance & Storage	Metal	Cream	Door	0.0	
18	Ceiba RC	Maintenance & Storage	Concrete	White	Wall A	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
19	Ceiba RC	Maintenance & Storage	Concrete	White	Wall B	0.1	
20	Ceiba RC	Maintenance & Storage	Concrete	White	Wall C	0.0	
21	Ceiba RC	Maintenance & Storage	Concrete	White	Wall D	0.3	
22	Ceiba RC	Maintenance & Storage	Gypsum	Cream	Division	0.0	
23	Ceiba RC	Maintenance & Storage	Metal	Red	Electrical Box	0.0	
24	Ceiba RC	Administration	Metal	Cream	Door Frame	0.0	
25	Ceiba RC	Administration	Metal	Cream	Door	0.1	
26	Ceiba RC	Administration	Gypsum	Cream	Wall A	0.0	
27	Ceiba RC	Administration	Gypsum	Cream	Wall B	0.1	
28	Ceiba RC	Administration	Concrete	Cream	Wall C	0.0	
29	Ceiba RC	Administration	Gypsum	Cream	Wall D	0.0	
30	Ceiba RC	Administration	Wood	Brown	Baseboard	0.0	
31	Ceiba RC	Administration	Metal	Brown	Window Frame	0.0	
32	Ceiba RC	Administration	Ceramic	Cream	Floor	-0.1	
33	Ceiba RC	Commander Office	Metal	Cream	Door Frame	0.0	
34	Ceiba RC	Commander Office	Metal	Cream	Door	0.1	
35	Ceiba RC	Commander Office	Wood	Cream	Wall A	0.0	
36	Ceiba RC	Commander Office	Concrete	Cream	Wall B	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
37	Ceiba RC	Commander Office	Concrete	Cream	Wall C	0.1	
38	Ceiba RC	Commander Office	Wood	Cream	Wall D	0.2	
39	Ceiba RC	Commander Office	Ceramic	Cream	Floor	0.2	
40	Ceiba RC	Group Office	Metal	Cream	Door Frame	0.0	
41	Ceiba RC	Group Office	Metal	Cream	Door	0.1	
42	Ceiba RC	Group Office	Wood	Cream	Wall A	0.0	
43	Ceiba RC	Group Office	Wood	Cream	Wall B	0.1	
44	Ceiba RC	Group Office	Concrete	Cream	Wall C	0.0	
45	Ceiba RC	Group Office	Concrete	Cream	Wall D	0.0	
46	Ceiba RC	Group Office	Ceramic	Cream	Floor	-0.1	
47	Ceiba RC	Women Bathroom	Metal	Cream	Door Frame	1.5	
48	Ceiba RC	Women Bathroom	Metal	Cream	Door	0.0	
49	Ceiba RC	Women Bathroom	Concrete	Cream	Upper Wall A	0.0	
50	Ceiba RC	Women Bathroom	Ceramic	Cream	Lower Wall A	0.1	
51	Ceiba RC	Women Bathroom	Concrete	Cream	Upper Wall B	0.0	
52	Ceiba RC	Women Bathroom	Ceramic	Cream	Lower Wall B	0.1	
53	Ceiba RC	Women Bathroom	Concrete	Cream	Upper Wall C	0.2	
54	Ceiba RC	Women Bathroom	Ceramic	Cream	Lower Wall C	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
55	Ceiba RC	Women Bathroom	Concrete	Cream	Upper Wall D	0.0	
56	Ceiba RC	Women Bathroom	Ceramic	Cream	Lower Wall D	0.3	
57	Ceiba RC	Women Bathroom	Ceramic	Cream	Floor	0.3	
58	Ceiba RC	Women Bathroom	Ceramic	White	Sink	25.8	
59	Ceiba RC	Women Bathroom	Ceramic	White	Handicap Sink	0.0	
60	Ceiba RC	Women Bathroom	Plastic	Cream	Divisions	0.0	
61	Ceiba RC	Women Bathroom	Ceramic	White	Toilet A	0.0	
62	Ceiba RC	Women Bathroom	Metal	Chrome	Toilet A, Valve	22.6	
63	Ceiba RC	Women Bathroom	Ceramic	White	Toilet B	0.0	
64	Ceiba RC	Women Bathroom	Metal	Chrome	Toilet B, Valve	21.8	
65	Ceiba RC	Men Bathroom	Metal	Cream	Door	1.5	
66	Ceiba RC	Men Bathroom	Metal	Cream	Door Frame	0.0	
67	Ceiba RC	Men Bathroom	Concrete	Cream	Upper Wall A	0.0	
68	Ceiba RC	Men Bathroom	Ceramic	Cream	Lower Wall A	0.1	
69	Ceiba RC	Men Bathroom	Concrete	Cream	Upper Wall B	0.2	
70	Ceiba RC	Men Bathroom	Ceramic	Cream	Lower Wall B	0.1	
71	Ceiba RC	Men Bathroom	Concrete	Cream	Upper Wall C	0.0	
72	Ceiba RC	Men Bathroom	Ceramic	Cream	Lower Wall C	0.3	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
73	Ceiba RC	Men Bathroom	Concrete	Cream	Upper Wall D	0.1	
74	Ceiba RC	Men Bathroom	Ceramic	Cream	Lower Wall D	0.0	
75	Ceiba RC	Men Bathroom	Plastic	Cream	Divisions	0.0	
76	Ceiba RC	Men Bathroom	Ceramic	Gray	Floor	0.1	
77	Ceiba RC	Men Bathroom	Ceramic	White	Handicap Sink	0.0	
78	Ceiba RC	Men Bathroom	Ceramic	White	Sink A	21.7	
79	Ceiba RC	Men Bathroom	Ceramic	White	Sink B	25.8	
80	Ceiba RC	Men Bathroom	Metal	Chrome	Toilet Valve	7.8	
81	Ceiba RC	Men Bathroom	Ceramic	White	Toilet	0.1	
82	Ceiba RC	Men Bathroom	Ceramic	White	Urinal A	0.0	
83	Ceiba RC	Men Bathroom	Metal	Chrome	Urinal A, Valve	7.6	
84	Ceiba RC	Men Bathroom	Ceramic	White	Urinal B	0.0	
85	Ceiba RC	Men Bathroom	Metal	Chrome	Urinal B, Valve	8.6	
86	Ceiba RC	Men Bathroom	Ceramic	White	Urinal C	0.1	
87	Ceiba RC	Men Bathroom	Metal	Chrome	Urinal C, Valve	5.7	
88	Ceiba RC	Room A	Metal	Cream	Door Frame	0.0	
89	Ceiba RC	Room A	Metal	Cream	Door	0.1	
90	Ceiba RC	Room A	Wood	Cream	Wall A	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
91	Ceiba RC	Room A	Gypsum	Orange	Wall B	0.0	
92	Ceiba RC	Room A	Concrete	Cream	Wall C	0.0	
93	Ceiba RC	Room A	Gypsum	Cream	Wall D	0.1	
94	Ceiba RC	Janitorial	Metal	Cream	Door Frame	1.1	
95	Ceiba RC	Janitorial	Metal	Cream	Door	0.1	
96	Ceiba RC	Janitorial	Concrete	Cream	Wall A	0.0	
97	Ceiba RC	Janitorial	Concrete	Cream	Wall B	0.1	
98	Ceiba RC	Janitorial	Concrete	Cream	Wall C	0.0	
99	Ceiba RC	Janitorial	Concrete	Cream	Wall D	0.3	
100	Ceiba RC	Janitorial	Ceramic	Gray	Shower Wall B	0.0	
101	Ceiba RC	Janitorial	Ceramic	Gray	Shower Wall C	0.1	
102	Ceiba RC	Janitorial	Ceramic	Gray	Shower Wall D	0.0	
103	Ceiba RC	Janitorial	Ceramic	White	Shower Floor	0.0	
104	Ceiba RC	Janitorial	Ceramic	Cream	Floor	0.1	
105	Ceiba RC	Janitorial	Ceramic	Gray	Dike	0.0	
106	Ceiba RC	Classroom	Metal	Cream	Door Frame, A	0.0	
107	Ceiba RC	Classroom	Metal	Cream	Door, A	0.1	
108	Ceiba RC	Classroom	Metal	Cream	Door Frame, B	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
109	Ceiba RC	Classroom	Metal	Cream	Door, B	0.0	
110	Ceiba RC	Classroom	Wood	Cream	Wall A	0.1	
111	Ceiba RC	Classroom	Gypsum	Cream	Wall B	0.0	
112	Ceiba RC	Classroom	Concrete	Cream	Wall C	0.3	
113	Ceiba RC	Classroom	Concrete	Cream	Wall D	0.0	
114	Ceiba RC	Training Storage	Metal	Brown	Window Frame	0.0	
115	Ceiba RC	Training Storage	Metal	Cream	Door Frame	0.0	
116	Ceiba RC	Training Storage	Metal	Cream	Door	0.1	
117	Ceiba RC	Training Storage	Concrete	Cream	Wall A	0.0	
118	Ceiba RC	Training Storage	Concrete	Cream	Wall B	0.1	
119	Ceiba RC	Training Storage	Concrete	Cream	Wall C	0.0	
120	Ceiba RC	Training Storage	Concrete	Cream	Wall D	0.3	
121	Ceiba RC	Entrance B	Metal	Brown	Door Frame	0.0	
122	Ceiba RC	Entrance B	Metal	Brown	Door	0.1	
123	Ceiba RC	Entrance B	Concrete	Cream	Upper Wall A	0.0	
124	Ceiba RC	Entrance B	Concrete	Green	Lower Wall A	0.3	
125	Ceiba RC	Entrance B	Concrete	Cream	Upper Wall B	0.0	
126	Ceiba RC	Entrance B	Concrete	Green	Lower Wall B	0.1	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
127	Ceiba RC	Entrance B	Concrete	Cream	Upper Wall C	0.0	
128	Ceiba RC	Entrance B	Concrete	Green	Lower Wall C	0.1	
129	Ceiba RC	Entrance B	Concrete	Cream	Upper Wall D	0.0	
130	Ceiba RC	Entrance B	Concrete	Green	Lower Wall D	0.0	
131	Ceiba RC	Supply Office	Metal	Cream	Door Frame A	0.1	
132	Ceiba RC	Supply Office	Metal	Brown	Door Frame	0.0	
133	Ceiba RC	Supply Office	Metal	Brown	Door	0.1	
134	Ceiba RC	Supply Office	Concrete	Green	Wall A	0.0	
135	Ceiba RC	Supply Office	Concrete	Green	Wall B	0.1	
136	Ceiba RC	Supply Office	Concrete	Green	Wall C	0.0	
137	Ceiba RC	Supply Office	Concrete	Green	Wall D	0.1	
138	Ceiba RC	Supply Office	Concrete	Cream	Column	0.0	
139	Ceiba RC	Commander Office	Metal	Cream	Door Frame	0.0	
140	Ceiba RC	Commander Office	Metal	Cream	Door	-0.1	
141	Ceiba RC	Commander Office	Concrete	Cream	Wall A	0.0	
142	Ceiba RC	Commander Office	Concrete	Cream	Wall B	0.0	
143	Ceiba RC	Commander Office	Concrete	Cream	Wall C	2.5	
144	Ceiba RC	Commander Office	Concrete	Cream	Wall D	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
145	Ceiba RC	Unit Storage A	Metal	Green	Door Frame	1.5	
146	Ceiba RC	Unit Storage A	Metal	Green	Door	0.0	
147	Ceiba RC	Unit Storage A	Concrete	Cream	Wall A	0.0	
148	Ceiba RC	Unit Storage A	Concrete	Cream	Wall B	0.0	
149	Ceiba RC	Unit Storage A	Concrete	Cream	Wall C	0.1	
150	Ceiba RC	Unit Storage A	Concrete	Cream	Wall D	0.1	
151	Ceiba RC	Unit Storage A	Concrete	Gray	Floor	0.0	
152	Ceiba RC	Unit Storage A	Metal	Black	Gate	0.1	
153	Ceiba RC	Unit Storage B	Metal	Green	Door Frame	1.5	
154	Ceiba RC	Unit Storage B	Metal	Green	Door	0.0	
155	Ceiba RC	Unit Storage B	Concrete	Cream	Wall A	0.0	
156	Ceiba RC	Unit Storage B	Concrete	Cream	Wall B	0.1	
157	Ceiba RC	Unit Storage B	Concrete	Cream	Wall C	0.0	
158	Ceiba RC	Unit Storage B	Concrete	Cream	Wall D	0.1	
159	Ceiba RC	Unit Storage B	Concrete	Green	Floor	0.0	
160	Ceiba RC	Vault	Metal	Orange	Door Frame	3.5	
161	Ceiba RC	Vault	Metal	Orange	Door	1.6	
162	Ceiba RC	Vault	Concrete	Cream	Wall A	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
163	Ceiba RC	Vault	Concrete	Cream	Wall B	0.1	
164	Ceiba RC	Vault	Concrete	Cream	Wall C	0.0	
165	Ceiba RC	Vault	Concrete	Cream	Wall D	0.3	
166	Ceiba RC	Vault	Concrete	Gray	Floor	0.0	
167	Ceiba RC	Vault	Metal	Black	Gates	0.1	
168	Ceiba RC	Electrical Room	Metal	Green	Door Frame	1.5	
169	Ceiba RC	Electrical Room	Metal	Green	Door	0.0	
170	Ceiba RC	Electrical Room	Concrete	Green	Wall A	0.1	
171	Ceiba RC	Electrical Room	Concrete	Green	Wall B	0.0	
172	Ceiba RC	Electrical Room	Concrete	Green	Wall C	0.0	
173	Ceiba RC	Electrical Room	Concrete	Green	Wall D	0.1	
174	Ceiba RC	Electrical Room	Metal	Green	Door Frame, Wall C	1.6	
175	Ceiba RC	Electrical Room	Metal	Green	Door, Wall C	0.6	
176	Ceiba RC	Electrical Room	Concrete	White	Ceiling	0.0	
177	Ceiba RC	Corridor B	Concrete	Cream	Wall B	0.0	
178	Ceiba RC	Corridor B	Concrete	Cream	Wall C	0.1	
179	Ceiba RC	Corridor B	Concrete	Cream	Wall D	0.0	
180	Ceiba RC	Corridor B	Metal	Green	Door Frame, Wall C	1.1	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
181	Ceiba RC	Corridor B	Metal	Green	Door	0.0	
182	Ceiba RC	Corridor B	Concrete	White	Ceiling	0.0	
183	Ceiba RC	Kitchen	Metal	Green	Door Frame	0.0	
184	Ceiba RC	Kitchen	Metal	Green	Door	0.1	
185	Ceiba RC	Kitchen	Concrete	Yellow	Upper Wall A	0.0	
186	Ceiba RC	Kitchen	Ceramic	Cream	Lower Wall A	0.1	
187	Ceiba RC	Kitchen	Concrete	Yellow	Upper Wall B	0.0	
188	Ceiba RC	Kitchen	Ceramic	Cream	Lower Wall B	0.0	
189	Ceiba RC	Kitchen	Concrete	Yellow	Upper Wall C	0.3	
190	Ceiba RC	Kitchen	Ceramic	Cream	Lower Wall C	0.0	
191	Ceiba RC	Kitchen	Concrete	Yellow	Upper Wall D	0.1	
192	Ceiba RC	Kitchen	Ceramic	Cream	Lower Wall D	0.0	
193	Ceiba RC	Kitchen	Metal	Green	Door Frame, Wall C	1.8	
194	Ceiba RC	Kitchen	Metal	Green	Door, Wall C	0.6	
195	Ceiba RC	Kitchen	Ceramic	Gray	Floor	0.1	
196	Ceiba RC	Kitchen, Storage	Metal	Cream	Door Frame	0.0	
197	Ceiba RC	Kitchen, Storage	Metal	Cream	Door	0.0	
198	Ceiba RC	Kitchen, Storage	Concrete	Cream	Wall A	0.3	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
199	Ceiba RC	Kitchen, Storage	Concrete	Cream	Wall B	0.0	
200	Ceiba RC	Kitchen, Storage	Concrete	Cream	Wall C	0.1	
201	Ceiba RC	Kitchen, Storage	Concrete	Cream	Wall D	0.0	
202	Ceiba RC	Kitchen, Storage	Concrete	Gray	Floor	0.3	
203	Ceiba RC	Kitchen, Storage	Concrete	Cream	Ceiling	0.4	
204	Ceiba RC	Break Room	Metal	Green	Door Frame	0.0	
205	Ceiba RC	Break Room	Metal	Green	Door	0.1	
206	Ceiba RC	Break Room	Concrete	Gray	Wall A	0.0	
207	Ceiba RC	Break Room	Concrete	Gray	Wall B	0.1	
208	Ceiba RC	Break Room	Concrete	Gray	Wall C	0.0	
209	Ceiba RC	Break Room	Wood	Gray	Wall D	0.3	
210	Ceiba RC	Break Room	Metal	Brown	Window Frame	0.0	
211	Ceiba RC	Showers	Wood	Cream	Door Frame	0.0	
212	Ceiba RC	Showers	Wood	Cream	Door	0.1	
213	Ceiba RC	Showers	Concrete	Cream	Upper Wall A	0.0	
214	Ceiba RC	Showers	Ceramic	Cream	Lower Wall A	0.1	
215	Ceiba RC	Showers	Concrete	Cream	Upper Wall B	0.0	
216	Ceiba RC	Showers	Ceramic	Cream	Lower Wall B	0.3	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
217	Ceiba RC	Showers	Concrete	Cream	Upper Wall C	0.1	
218	Ceiba RC	Showers	Ceramic	Cream	Lower Wall C	0.0	
219	Ceiba RC	Showers	Concrete	Cream	Upper Wall D	0.0	
220	Ceiba RC	Showers	Ceramic	Cream	Lower Wall D	0.3	
221	Ceiba RC	Showers	Plastic	Cream	Divisions	0.3	
222	Ceiba RC	Showers	Ceramic	Orange	Floor	0.0	
223	Ceiba RC	Showers	Ceramic	White	Sink A	0.1	
224	Ceiba RC	Showers	Ceramic	White	Sink B	0.0	
225	Ceiba RC	Showers	Ceramic	White	Sink C	0.3	
226	Ceiba RC	Showers	Ceramic	White	Sink D	0.0	
227	Ceiba RC	Showers	Ceramic	White	Sink E	0.1	
228	Ceiba RC	Showers	Ceramic	White	Sink F	0.3	
229	Ceiba RC	Showers	Ceramic	White	Toilet A	0.0	
230	Ceiba RC	Showers	Ceramic	White	Toilet B	0.1	
231	Ceiba RC	Showers	Ceramic	White	Toilet C	0.3	
232	Ceiba RC	Showers	Metal	Chrome	Toilet Valve	7.5	
233	Ceiba RC	Showers	Ceramic	White	Urinal	0.0	
234	Ceiba RC	Showers	Metal	Chrome	Urinal Valve	5.8	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
235	Ceiba RC	Unit Storage C	Metal	Green	Door Frame	1.8	
236	Ceiba RC	Unit Storage C	Metal	Green	Door	0.6	
237	Ceiba RC	Unit Storage C	Concrete	Cream	Wall A	0.0	
238	Ceiba RC	Unit Storage C	Wood	Cream	Wall B	0.1	
239	Ceiba RC	Unit Storage C	Concrete	Cream	Wall C	0.0	
240	Ceiba RC	Unit Storage C	Concrete	Cream	Wall D	0.3	
241	Ceiba RC	Unit Storage C	Concrete	Yellow	Floor	0.2	
242	Ceiba RC	Open Court Area	Concrete	Cream	Wall A	0.1	
243	Ceiba RC	Open Court Area	Concrete	Green	Column Wall A	0.0	
244	Ceiba RC	Open Court Area	Concrete	Cream	Wall B	0.3	
245	Ceiba RC	Open Court Area	Concrete	Green	Column Wall B	0.0	
246	Ceiba RC	Open Court Area	Concrete	Cream	Wall C	0.4	
247	Ceiba RC	Open Court Area	Concrete	Green	Column Wall C	0.0	
248	Ceiba RC	Open Court Area	Concrete	Cream	Wall D	0.3	
249	Ceiba RC	Open Court Area	Concrete	Green	Column Wall D	0.3	
250	Ceiba RC	Open Court Area	Concrete	Yellow	Floor	0.0	
251	Ceiba RC	Open Court Area	Concrete	Blue	Floor	0.1	
252	Ceiba RC	Open Court Area	Concrete	Gray	Floor	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
253	Ceiba RC	Outside Storage	Metal	Green	Door Frame	1.1	
254	Ceiba RC	Outside Storage	Metal	Green	Door	0.5	
255	Ceiba RC	Outside Storage	Concrete	Cream	Wall A	0.1	
256	Ceiba RC	Outside Storage	Concrete	Cream	Wall B	0.0	
257	Ceiba RC	Outside Storage	Concrete	Cream	Wall C	0.1	
258	Ceiba RC	Outside Storage	Concrete	Cream	Wall D	0.0	
259	Ceiba RC	Outside Storage	Concrete	White	Ceiling	0.1	
260	Ceiba RC	Women Bathroom, Outside	Metal	White	Door Frame	0.0	
261	Ceiba RC	Women Bathroom, Outside	Metal	White	Door	0.1	
262	Ceiba RC	Women Bathroom, Outside	Wood	Gypsum	Wall A	0.0	
263	Ceiba RC	Women Bathroom, Outside	Wood	Gypsum	Wall B	0.2	
264	Ceiba RC	Women Bathroom, Outside	Wood	Gypsum	Wall C	0.1	
265	Ceiba RC	Women Bathroom, Outside	Wood	Gypsum	Wall D	0.1	
266	Ceiba RC	Women Bathroom, Outside	Wood	Gypsum	Ceiling	0.0	
267	Ceiba RC	Women Bathroom, Outside	Ceramic	White	Sink	0.1	
268	Ceiba RC	Women Bathroom, Outside	Ceramic	White	Toilet	0.0	
269	Ceiba RC	Guard House A	Metal	Green	Door Frame	0.0	
270	Ceiba RC	Guard House A	Metal	Green	Door	0.1	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
271	Ceiba RC	Guard House A	Concrete	Cream	Wall A	0.0	
272	Ceiba RC	Guard House A	Concrete	Cream	Wall B	0.1	
273	Ceiba RC	Guard House A	Concrete	Cream	Wall C	0.0	
274	Ceiba RC	Guard House A	Concrete	Cream	Wall D	0.1	
275	Ceiba RC	Guard House A	Concrete	White	Ceiling	0.0	
276	Ceiba RC	Guard House A	Ceramic	Cream	Floor	10.9	
277	Ceiba RC	Guard House B	Concrete	Cream	Wall A	0.0	
278	Ceiba RC	Guard House B	Concrete	Cream	Wall B	0.0	
279	Ceiba RC	Guard House B	Concrete	Cream	Wall C	0.1	
280	Ceiba RC	Guard House B	Concrete	Cream	Wall D	0.0	
281	Ceiba RC	Guard House B	Concrete	Cream	Ceiling	-0.4	
282	Ceiba RC	Bathroom A	Metal	Gray	Door Frame	0.0	
283	Ceiba RC	Bathroom A	Metal	Gray	Door	0.1	
284	Ceiba RC	Bathroom A	Concrete	White	Upper Wall A	0.0	
285	Ceiba RC	Bathroom A	Ceramic	White	Lower Wall A	0.0	
286	Ceiba RC	Bathroom A	Concrete	White	Upper Wall B	0.0	
287	Ceiba RC	Bathroom A	Ceramic	White	Lower Wall B	0.1	
288	Ceiba RC	Bathroom A	Concrete	White	Upper Wall C	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
289	Ceiba RC	Bathroom A	Ceramic	White	Lower Wall C	0.1	
290	Ceiba RC	Bathroom A	Concrete	White	Upper Wall D	0.0	
291	Ceiba RC	Bathroom A	Ceramic	White	Lower Wall D	-0.1	
292	Ceiba RC	Bathroom A	Ceramic	Green	Floor	0.0	
293	Ceiba RC	Bathroom A	Ceramic	White	Toilet	-0.1	
294	Ceiba RC	Bathroom A	Ceramic	White	Sink	0.0	
295	Ceiba RC	Bathroom B	Metal	Gray	Door Frame	0.0	
296	Ceiba RC	Bathroom B	Metal	Gray	Door	0.1	
297	Ceiba RC	Bathroom B	Concrete	White	Upper Wall A	0.1	
298	Ceiba RC	Bathroom B	Ceramic	White	Lower Wall A	0.0	
299	Ceiba RC	Bathroom B	Concrete	White	Upper Wall B	0.1	
300	Ceiba RC	Bathroom B	Ceramic	White	Lower Wall B	0.3	
301	Ceiba RC	Bathroom B	Concrete	White	Upper Wall C	0.0	
302	Ceiba RC	Bathroom B	Ceramic	White	Lower Wall C	0.0	
303	Ceiba RC	Bathroom B	Concrete	White	Upper Wall D	0.1	
304	Ceiba RC	Bathroom B	Ceramic	White	Lower Wall D	0.3	
305	Ceiba RC	Bathroom B	Ceramic	Gray	Floor	0.0	
306	Ceiba RC	Bathroom B	Ceramic	White	Toilet	0.1	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
307	Ceiba RC	Bathroom B	Ceramic	White	Sink	0.0	
308	Ceiba RC	NGX Shop	Metal	Brown	Door Frame	0.1	
309	Ceiba RC	NGX Shop	Metal	Brown	Door	0.0	
310	Ceiba RC	NGX Shop	Concrete	White	Wall A	0.0	
311	Ceiba RC	NGX Shop	Concrete	White	Wall A, Column	0.2	
312	Ceiba RC	NGX Shop	Concrete	White	Wall B	0.0	
313	Ceiba RC	NGX Shop	Concrete	White	Wall C	0.1	
314	Ceiba RC	NGX Shop	Concrete	White	Wall D	0.0	
315	Ceiba RC	NGX Shop	Concrete	White	Center Column	0.0	
316	Ceiba RC	NGX Shop	Metal	Cream	Door Frame	0.0	
317	Ceiba RC	NGX Shop	Metal	Cream	Door	0.1	
318	Ceiba RC	NGX Shop	Gypsum	Gray	Wall A	0.0	
319	Ceiba RC	NGX Shop	Concrete	Gray	Wall B	0.1	
320	Ceiba RC	NGX Shop	Concrete	Gray	Wall C	0.2	
321	Ceiba RC	NGX Shop	Gypsum	Gray	Wall D	0.3	
322	Ceiba RC	NGX Break Room	Metal	Cream	Door Frame	0.0	
323	Ceiba RC	NGX Break Room	Metal	Cream	Door	0.1	
324	Ceiba RC	NGX Break Room	Gypsum	Gray	Wall A	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
325	Ceiba RC	NGX Break Room	Gypsum	Gray	Wall B	0.0	
326	Ceiba RC	NGX Break Room	Concrete	Gray	Wall C	-0.3	
327	Ceiba RC	NGX Break Room	Gypsum	Gray	Wall D	0.1	
328	Ceiba RC	NGX Storage Room	Metal	Cream	Door Frame	0.0	
329	Ceiba RC	NGX Storage Room	Metal	Cream	Door	0.1	
330	Ceiba RC	NGX Storage Room	Gypsum	Gray	Wall A	0.0	
331	Ceiba RC	NGX Storage Room	Gypsum	Gray	Wall B	0.0	
332	Ceiba RC	NGX Storage Room	Concrete	Gray	Wall C	0.1	
333	Ceiba RC	NGX Storage Room	Concrete	Gray	Wall D	0.0	
334	Ceiba RC	Figna Office	Metal	Black	Door Frame	0.0	
335	Ceiba RC	Figna Office	Metal	Black	Door	0.0	
336	Ceiba RC	Figna Office	Concrete	White	Wall A	0.0	
337	Ceiba RC	Figna Office	Concrete	Orange	Wall B	0.1	
338	Ceiba RC	Figna Office	Concrete	Orange	Wall C	0.0	
339	Ceiba RC	Figna Office	Concrete	White	Wall D	0.1	
340	Ceiba RC	Figna Office	Gypsum	Orange	Division	0.3	
341	Ceiba RC	Figna Office	Ceramic	Gray	Floor	0.0	
342	Ceiba RC	Figna Office	Ceramic	Gray	Wall Base	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
343	Ceiba RC	Exterior Wall A	Concrete	Cream	Wall A	0.0	
344	Ceiba RC	Exterior Wall A	Concrete	Green	Column Wall A	0.1	
345	Ceiba RC	Exterior Wall A	Plastic	Green	Water Pipe	0.0	
346	Ceiba RC	Exterior Wall A	Concrete	Cream	Small Garden Wall	0.0	
347	Ceiba RC	Exterior Wall B	Concrete	Cream	Wall B	0.0	
348	Ceiba RC	Exterior Wall B	Concrete	Green	Column Wall B	0.1	
349	Ceiba RC	Exterior Wall B	Metal	Green	Ladder on Wall	0.0	
350	Ceiba RC	Exterior Wall B	Plastic	Green	Water Pipe	0.0	
351	Ceiba RC	Exterior Wall C	Concrete	Cream	Wall C	0.0	
352	Ceiba RC	Exterior Wall C	Concrete	Green	Column Wall C	0.1	
353	Ceiba RC	Exterior Wall D	Concrete	Cream	Wall D	0.0	
354	Ceiba RC	Exterior Wall D	Plastic	Green	Water Pipe	0.1	
355	Ceiba RC	Exterior Wall D	Concrete	Cream	Wall Divisions	0.0	
356	Ceiba RC	Exterior Wall D	Metal	Red	Manhole	0.0	
357	Ceiba RC	Exterior, Outside Storage	Concrete	White	Wall A	0.0	
358	Ceiba RC	Exterior, Outside Storage	Concrete	White	Wall B	0.1	
359	Ceiba RC	Exterior, Outside Storage	Concrete	White	Wall C	0.0	
360	Ceiba RC	Exterior, Outside Storage	Concrete	White	Wall D	0.0	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
361	Ceiba RC	Guard House A- Exterior	Concrete	Cream	Wall A	0.0	
362	Ceiba RC	Guard House A- Exterior	Concrete	Cream	Wall B	-0.1	
363	Ceiba RC	Guard House A- Exterior	Concrete	Cream	Wall C	0.0	
364	Ceiba RC	Guard House A- Exterior	Concrete	Cream	Wall D	0.3	
365	Ceiba RC	Guard House B- Exterior	Concrete	Cream	Wall A	0.0	
366	Ceiba RC	Guard House B- Exterior	Concrete	Cream	Wall B	-0.1	
367	Ceiba RC	Guard House B- Exterior	Concrete	Cream	Wall C	0.0	
368	Ceiba RC	Guard House B- Exterior	Concrete	Cream	Wall D	0.1	
369	Ceiba RC	Parking Lot	Concrete	Yellow	Curb	0.1	
370	Ceiba RC	Parking Lot	Asphalt	Yellow	Parking Line	0.6	
371	Ceiba RC	Parking Lot	Asphalt	Blue	Handicap Line	0.0	
RETESTING							
373	Ceiba RC	Guard House A- Exterior	Concrete	Cream	Wall B	0.1	
374	Ceiba RC	Guard House A- Exterior	Concrete	Cream	Wall C	0.0	
375	Ceiba RC	Guard House A- Exterior	Concrete	Cream	Wall D	0.0	
376	Ceiba RC	Guard House B- Exterior	Concrete	Cream	Wall A	0.1	
377	Ceiba RC	Guard House B- Exterior	Concrete	Cream	Wall B	0.2	
378	Ceiba RC	Guard House B- Exterior	Concrete	Cream	Wall C	0.1	

Approved By: Ady Padan Ph.D

Date: 10/11/21

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd. Floor, Santurce, P. R. 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: Puerto Rico Army National Guard
Project Name: Ceiba Readiness Center
Address: Ceiba, Puerto Rico

Date: 10/11/21
Inspector: Anthony Rivera
XRF Serial No.: 2385

Reading #	Structure	Room	Substrate	Color	Component & Location	XRF Reading	Laboratory Result (% or mg/cm ²)
379	Ceiba RC	Guard House B- Exterior	Concrete	Cream	Wall D	0.3	
380	Ceiba RC	Parking Lot	Concrete	Yellow	Curb	0.1	
381	Ceiba RC	Parking Lot	Asphalt	Yellow	Parking Line	0.6	
382	Ceiba RC	Parking Lot	Asphalt	Blue	Handicap Line	0.2	

Approved By: Ady Padan Ph.D

Date: 10/11/21

Appendix III



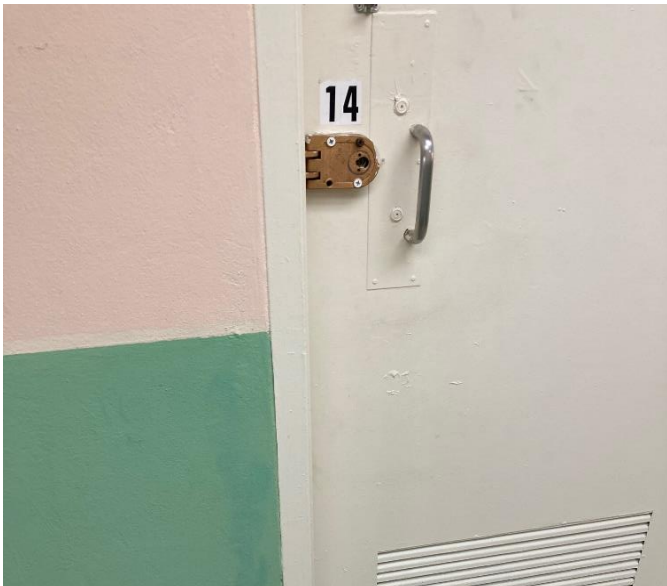
Selective Photos



**General View of Ceiba Readiness Center
Ceiba, Puerto Rico**



**Typical Cream Metal Door Frame
Painted with LBP
Maintenance & Storage**



**Typical Cream Metal Door Frame
Painted with LBP
Women Bathroom**

Selective Photos



**Typical White Ceramic Sink
Painted with LBP
Women Bathroom**



**Typical Chrome Metal Toilet Valve
Painted with LBP
Women Bathroom**



**Cream Metal Door
Painted with LBP
Men Bathroom**

Selective Photos



**Typical White Ceramic Sink
Painted with LBP
Men Bathroom**



**Typical Chrome Metal Toilet Valve
Painted with LBP
Men Bathroom**



**Typical Chrome Metal Urinal Valve
Painted with LBP
Men Bathroom**

Selective Photos

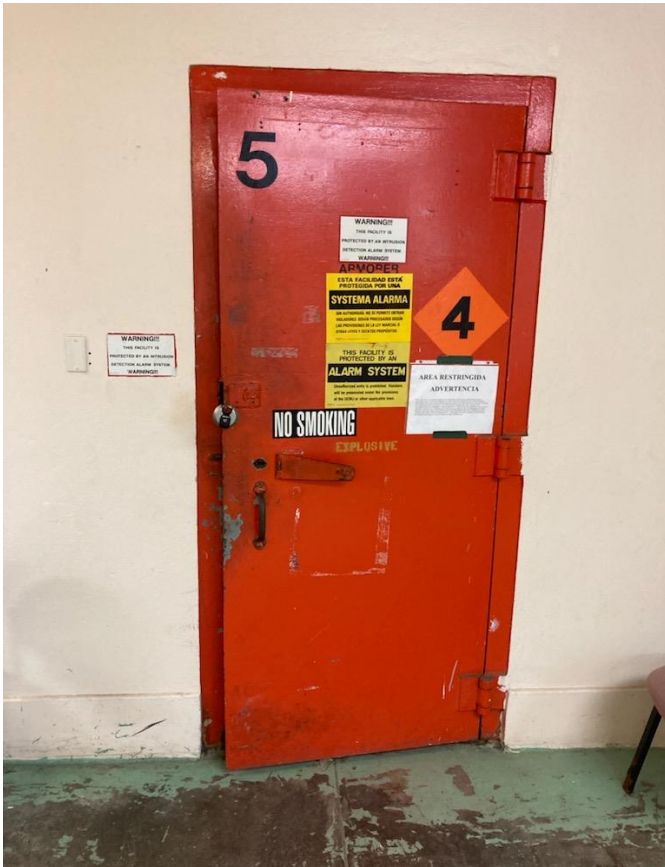


**Cream Concrete Wall C
Painted with LBP
Commander Office**



**Typical Green Metal Door Frame
Painted with LBP
Unit Storage A**

Selective Photos



**Orange Metal Door
Painted with LBP
Vault**



**Orange Metal Door Frame
Painted with LBP
Vault**

Selective Photos



**Typical Green Metal Door Frame
Painted with LBP
Outside Storage**

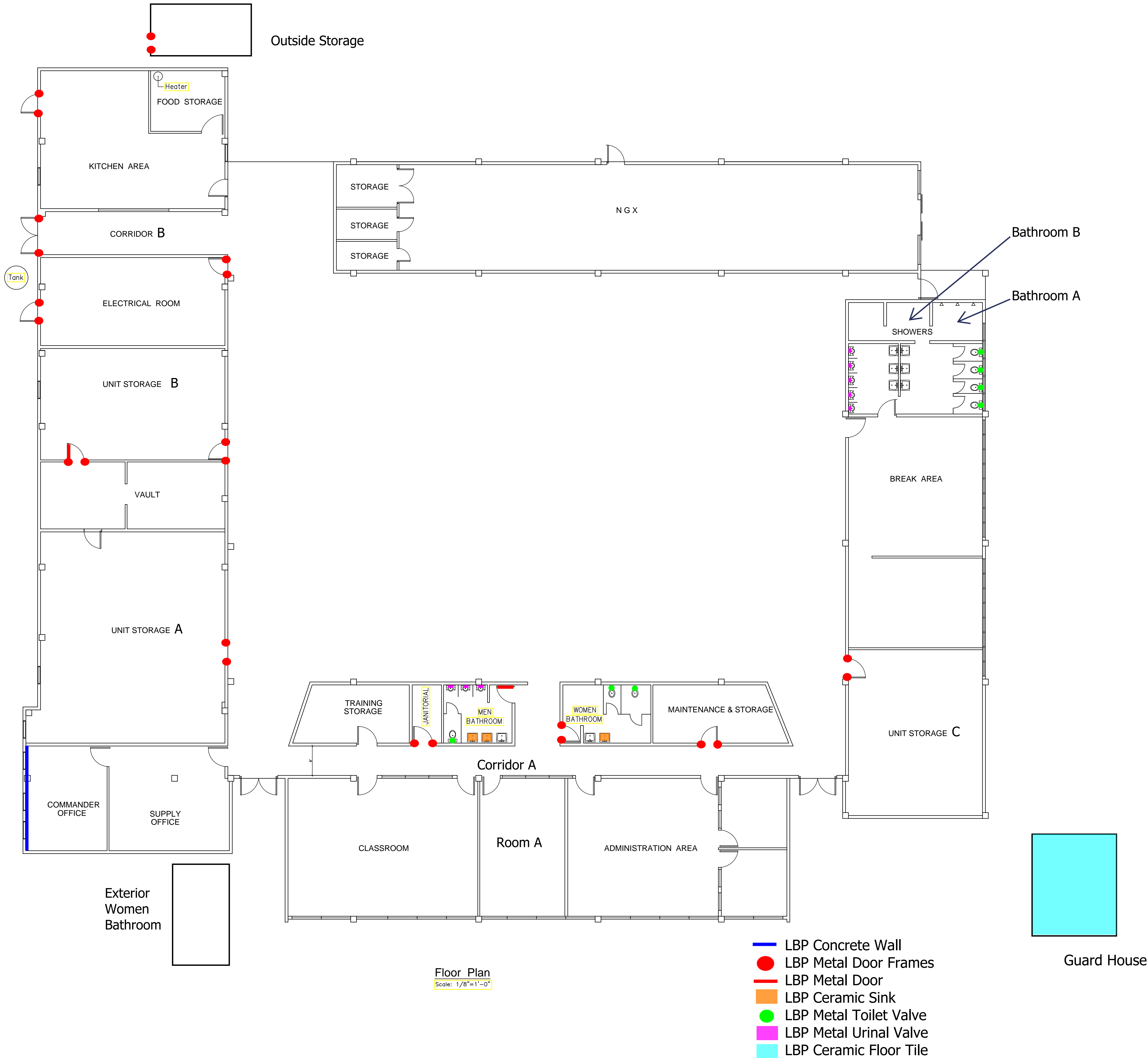


**Cream Ceramic Floor Tile
Painted with LBP
Guardhouse A**

Appendix IV



Schematic Distribution of LBP Components at Ceiba Readiness Center, Ceiba, PR



DESIGN BY:

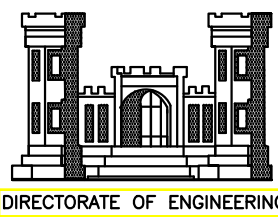
DRAWN BY:

VERIFIED BY:

SCALE:

AS NOTED

DATE:



DIRECTORATE OF ENGINEERING

PUERTO RICO ARMY NATIONAL GUARD

DIRECTORATE OF ENGINEERING

P.O. BOX 3786 SAN JUAN PUERTO RICO 00904 - 3786

PROJECT:

CEIBA READINESS CENTER

SHEET TITLE:

FLOOR PLAN

P

R

A

R

N

G

DATE

DESCRIPTION

N.O.

REVISIONS

SHEET NUMBER:

1

OF

1

SHEET NAME:

A-1

EXHIBIT F: Asbestos Containing Material Report



**ENVIRONMENTAL SURVEY
FOR
ASBESTOS CONTAINING MATERIALS (ACM)
AT
CEIBA READINESS CENTER
CEIBA, PUERTO RICO**

Prepared For:
PR National Guard

October 2021

Prepared By:

Analytical Environmental
Services International, Inc.
611 Monserrate Street
2nd Floor, Santurce, P.R. 00907
(787) 722-0220 / Fax (787) 724-5788

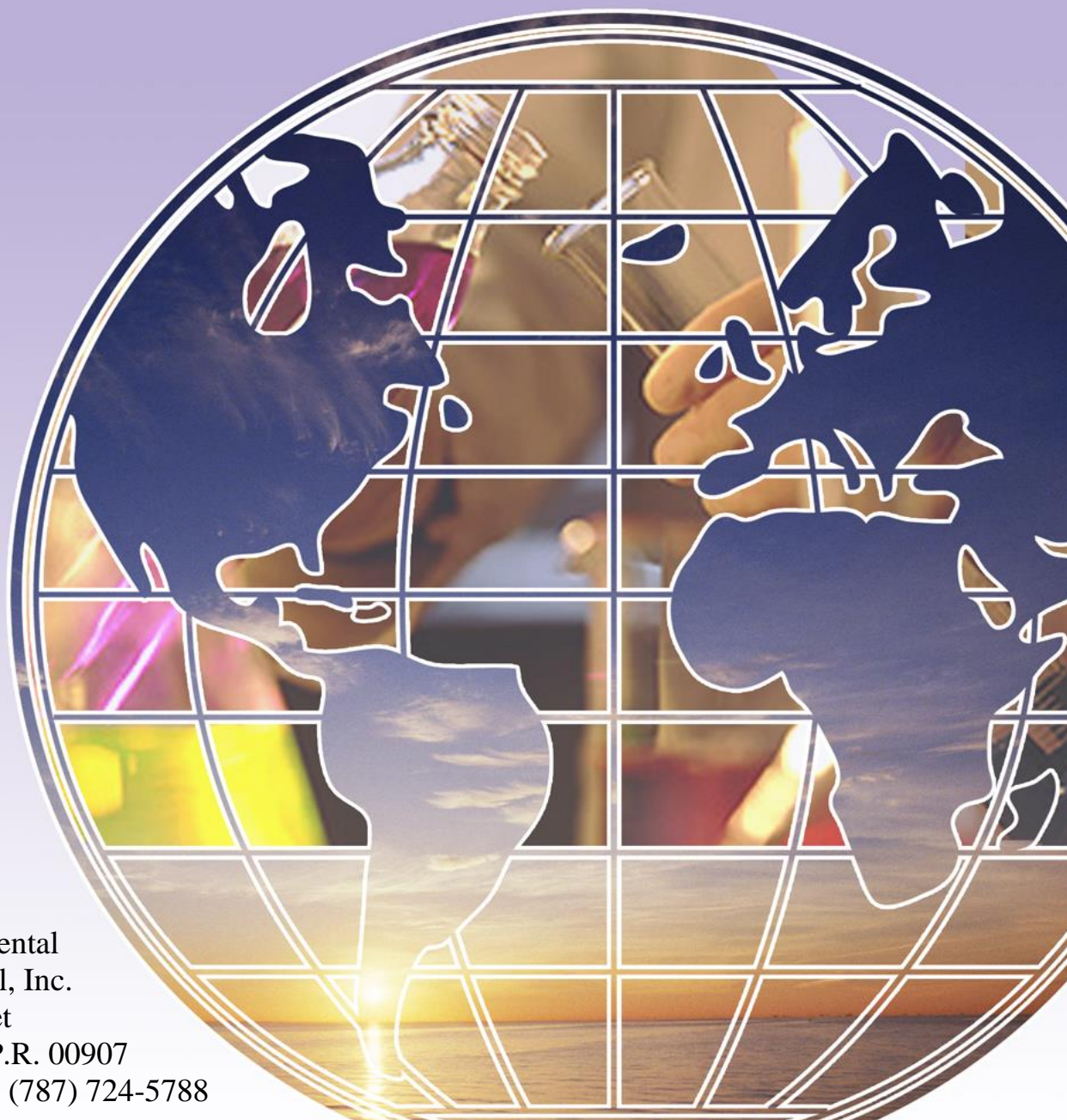


TABLE OF CONTENTS

I. SUMMARY

1.0 INTRODUCTION

2.0 GENERAL BACKGROUND

3.0 PROJECT IDENTIFICATION/DESCRIPTION

4.0 SAMPLING METHODS

5.0 SAMPLING RESULTS

6.0 CONCLUSIONS

APPENDIX I - Certifications and Accreditations

APPENDIX II - Physical Assessment Inspection Form

APPENDIX III - Analytical Results

APPENDIX IV - Selective Photos

APPENDIX V- Floor Plans with Location of Sampling
Points and Distribution of ACM

I. SUMMARY

Analytical Environmental Services International, Inc (AES International) was contracted by the PR National Guard to perform an Asbestos Containing Materials (ACM) survey for the Ceiba Readiness Center in Ceiba, Puerto Rico.

The ACM inspection was conducted on 10/6 & 10/11/2021 by Javier Medina and Anthony Rivera, both DRNA certified asbestos inspectors.

The scope of the survey included sampling of suspected ACM present and analysis of the samples collected. During the survey, forty-six (46) samples were collected from suspected materials. Samples collected were analyzed by Polarized Light Microscopy (PLM) for asbestos fibers.

ACM identified in the following components:

- Black Mastic under 2nd layer of VFT. Material is classified as miscellaneous, category I, non-friable, ACM. Approximately 2,450 sq.ft. of this material are present.
- Black Mastic on HVAC Duct. Material is classified as miscellaneous, category I, non-friable, ACM. Approximately 190 ln.ft. of this material are present.
- Mastic under ceramic tile. Material is classified as miscellaneous, category I, non-friable, ACM. Approximately 330 sq.ft. of this material are present.
- Roof flashing. Material is classified as miscellaneous, category I, non-friable, ACM. Approximately 284 ln.ft of this material are present.

If demolition/remodeling activities will be conducted in the nearest future it is recommended to remove all ACM known, or suspected, present within the structure, as to comply with NESHAP/DRNA requirements.

1.0 INTRODUCTION

Analytical Environmental Services International, Inc (AES International) was contracted by PR National Guard to perform an Asbestos Containing Materials (ACM) survey for the Ceiba Readiness Center in Ceiba, Puerto Rico.

The ACM inspection was conducted 10/6 & 10/11/2021 by Javier Medina and Anthony Rivera, both DRNA certified asbestos inspectors (see Appendix I for credentials). The scope of the survey included sampling of suspected ACM and analysis of samples collected.

Samples collected were sent to AES International Inc., a NVLAP accredited laboratory located in Santurce, Puerto Rico. Samples were analyzed by Polarized Light Microscopy method (PLM), in accordance to EPA recommended procedures. The samples are defined as asbestos containing materials (ACM) if they contain more than 1% asbestos.

2.0 GENERAL BACKGROUND

Asbestos was used in the construction industry from 1900 to 1989. It is still being used today in various products. The health effects of asbestos have been studied since the 1930's. More health studies have been conducted in asbestos than any other natural substance. The mere presence of asbestos containing materials does not necessarily constitute a health hazard. However, when these materials become disturbed from building renovation, maintenance, or other every day activities that allow fibers to be released into the environment, a potential hazard does exist.

The relationship between exposure level and health risk is very complex. Although this relationship is not completely understood, asbestos exposure has been associated with various types of lung diseases including a debilitating lung disease called ASBESTOSIS; a rare cancer of chest called MESOTHELIOMA; and cancers of the esophagus, stomach, colon and other organs. Asbestosis is not fatal; it is however incurable. One who has it cannot breathe easily and physical activity becomes limited. MESOTHELIOMA is 100% fatal, as there is no cure. These diseases can be directly linked to asbestos because of the mineral particles that can be found in the lining of the lungs and stomach, since the body cannot absorb these minerals. Tests have determined that asbestos can cause cancer, but scientists disagree on the amount of asbestos fibers that must be inhaled to cause cancer. The nose filters out all visible particles. Therefore, only the microscopic fibers are the one who cause the problems.

Studies indicate different health effect resulting from exposure to chrysotile asbestos versus exposure to the amphibole form of asbestos. The latter, which include tremolite, amosite, actinolite, anthophyllite and crocidolite have more significant health impact than chrysotile.

Some scientists cite studies concluding that is the size of the fibers deposited in the lungs that result in cancer. Long, thin fibers, greater than 8 microns in length and less than 0.25 microns in diameter show the highest potential of cancer development.

2.1 National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA's rules concerning the application, removal, and disposal of ACM, as well as manufacturing, spraying and fabricating of ACM were issued under the asbestos NESHAP regulation (U.S. EPA National Emission Standards for Hazardous Air Pollutants, 40 CFR 61 Subpart M, October 30, 1987). The asbestos NESHAP regulation governs asbestos demolition and renovation projects in all facilities. The NESHAP rule usually requires owners or operators to have all friable ACM removed before the building is demolished and may require its removal before renovation. If friable ACM shall be disturbed, the NESHAP rule may require appropriate work practices, or procedures for emission control. The rule states that any ACM, which may become friable, poses a potential hazard that should be addressed.

A revised NESHAP ruling was released on November 20, 1990, effective February 20, 1991 which includes as the responsibility of the owner, or operator, to "prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II non-friable ACM." (40 CFR, Part 61, National Emission Standards for hazardous Air Pollutants, Asbestos NESHAP Revision, Final Rule, November 20, 1990).

3.0 PROJECT IDENTIFICATION/DESCRIPTION

The area investigated consists of kitchen area, electrical room, three (3) unit storages, vault, commander office, supply office, classroom, administration area, break room, three (3) bathrooms, one (1) shower area, training storage, janitor, maintenance & storage and NGX area with an office, storage and break room.

4.0 SAMPLING METHODS

Forty-five (45) samples were collected from suspected ACM. Samples were collected from roof built-up and flashing, gypsum board, vinyl floor tile, baseboard, sealant, mastic, caulking and ceiling tiles.

5.0 SAMPLING RESULTS

Location of materials and results are shown in the physical assessment form in Appendix II. Analytical results of samples collected are shown in Appendix III. The results are presented according to functional areas tested. The suspected samples collected were analyzed by Polarized Light Microscopy (PLM) for asbestos fibers.

Asbestos fibers above 1% area (ACM) were identified in eight (8) of the forty-five (45) samples collected and analyzed (see summary Table 1).

6.0 CONCLUSIONS

ACM were detected during a survey conducted for Ceiba Readiness Center. Results are presented in the summary.

The ACM sampling relates to surfaces accessible and not covered by rigid barriers. Should any material hidden under surfaces, or architectural components be present, it must be assumed as ACM.



Anthony Rivera, DRNA Asbestos Inspector
Lic#: ASB-0921-0466-SI



Javier Medina, DRNA Asbestos Inspector
Lic#: ASB-0921-0468-SI

Appendix I



Asbestos Inspector Credentials

	<p>TARJETA DE REGISTRO LA REMOCION PARA DE ASBESTO</p>
<p>ASB-0921-0466-SI</p>	<p>Esta tarjeta autoriza a:</p>
<p>Número de Registro</p>	<p>Anthony Rivera Eaves</p>
<p>30-Aug-2022</p>	<p>Inspector</p>
<p>Fecha de vencimiento</p>	<p>A trabajar en la remoción de asbesto en Puerto Rico. Esta persona NO es un empleado del DRNA.</p>
	<p> Firma Autorizada - Departamento Recursos Naturales y Ambientales</p>

Asbestos Inspector Credentials

	TARJETA DE REGISTRO PARA LA REMOCION DE ASBESTO
	Esta tarjeta autoriza a:
	Javier Medina Rosa
	Inspector
	A trabajar en la remoción de asbesto en P.R. Esta persona NO es un empleado del DRNA.
ASB-0921-0468-SI	
Número de Registro	Firma Autorizada - Departamento
1-Sep-2022	Recursos Naturales y Ambientales
Fecha de vencimiento	

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AES International

611 Monserrate

Santurce, PR 00907

Mr. Ady Padan

Phone: 787-722-0220 Fax: 787-724-5788

Email: yota1@bellsouth.net

<http://www.aesipr.org>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200051-0

Bulk Asbestos Analysis

Code

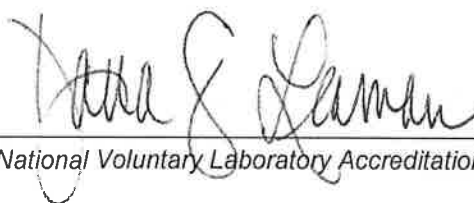
Description

18/A01

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples

18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials



For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200051-0

AES International

Santurce, PR

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2021-01-01 through 2021-12-31

Effective Dates

A handwritten signature in black ink, which appears to read "Peter S. Lamm".

For the National Voluntary Laboratory Accreditation Program

Appendix II



ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/6/2021**

Structure: **Ceiba Readiness**
 Page: **1** of **6**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
JR1	Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Entrance	Misc.	Yes	NF	Entrance, Hallway, South Side Rooms	3% CHR, Asbestos found in bitumen of 2nd layer		X	
JR2	Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Hallway Area	Misc.	Yes	NF	Entrance, Hallway, South Side Rooms	2% CHR, Asbestos found in bitumen of 2nd layer		X	
JR3	Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Supply Office	Misc.	Yes	NF	Entrance, Hallway, South Side Rooms	2% CHR, Asbestos found in bitumen of 2nd layer		X	
JR4	Brown Baseboard with Brown Glue	Misc.	No	NF	Entrance, Hallway, South Side Rooms	ND		X	
JR5	Brown Baseboard with Brown Glue	Misc.	No	NF	Entrance, Hallway, South Side Rooms	ND		X	
JR6	Brown Baseboard with Brown Glue	Misc.	No	NF	Entrance, Hallway, South Side Rooms	ND		X	

Inspected by: **Javier Medina**

Date: **10/6/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/6/2021**

Structure: **Ceiba Readiness**
 Page: **2** of **6**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
JR7	Sealant from AC Ducts in Classroom	Misc.	Yes	NF	West, Classroom Area and Administration	4% CHR		X	
JR8	Sealant from AC Ducts in Classroom	Misc.	Yes	NF	West, Classroom Area and Administration	3% CHR		X	
JR9	Sealant from AC Ducts in Classroom	Misc.	Yes	NF	West, Classroom Area and Administration	3% CHR		X	
JR10	Mastic under Ceramic Floor Tile, Administration Area	Misc.	Yes	F	Administration Area	2% CHR		X	
JR11	Gypsum Sample with Plaster from Wall in Administration Area	Misc.	No	F	Administration Area	ND		X	
JR12	Gypsum Sample with Plaster from Wall in Administration Area	Misc.	No	F	Administration Area	ND		X	

Inspected by: **Javier Medina**

Date: **10/6/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/6/2021**

Structure: **Ceiba Readiness**
 Page: **3** of **6**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
JR13	Gypsum Board Wall from Administration Area	Misc.	No	F		ND		X	
JR14	Wood Baseboard Caulking, Administration Area	Misc.	No	NF	Administration Area	ND		X	
JR15	Wood Baseboard Caulking, Administration Area	Misc.	No	NF	Administration Area	ND		X	
JR16	Wood Baseboard Caulking, Administration Area	Misc.	No	NF	Administration Area	ND		X	
JR17	White Ceiling Tile 2'x 4' from Classroom Area	Misc.	No	F		ND		X	
JR18	White Ceiling Tile 2'x 4' from Entrance Area	Misc.	No	F		ND		X	

Inspected by: **Javier Medina**

Date: **10/6/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/6/2021**

Structure: **Ceiba Readiness**
 Page: **4** of **6**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
JR19	White Ceiling Tile 2'x 4' from Hallway Area	Misc.	No	F		ND		X	
JR20	Cream Vinyl Floor Tile 12"x 12" with Brown Glue, Store Office Area	Misc.	No	NF	Administration Area	ND		X	
JR21	Cream Vinyl Floor Tile 12"x 12" with Brown Glue from Break Room Area	Misc.	No	NF	Administration Area	ND		X	
JR22	Cream Vinyl Floor Tile 12"x 12" with Brown Glue from Mech Room	Misc.	No	NF	Administration Area	ND		X	
JR23	Roof Flashing from East Side, Lower Roof in Front of Parking Area	Misc.	No	F		ND		X	
JR24	Roof Flashing from Center, Lower Roof in Front of Parking Area	Misc.	No	F		ND		X	

Inspected by: **Javier Medina**

Date: **10/6/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/6/2021**

Structure: **Ceiba Readiness**
 Page: **5** of **6**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
JR25	Roof Built-Up from Base of Pipe on Lower Roof in Front of Parking Area	Misc.	No	NF		ND		X	
JR26	Roof Flashing from North Side of Lower Roof (Front Building) in Front of Road #3	Misc.	Yes	NF		3% CHR		X	
JR27	Roof Built-Up from Base of AC Machine, Lower Roof in Front of Road #3	Misc.	No	NF		ND		X	
JR28	Roof Built-Up from Base of AC Machine, Lower Roof in Front of Road #3 (Center)	Misc.	No	NF		ND		X	
JR29	Roof Flashing from Upper Roof, West Side of Building	Misc.	No	NF		ND		X	
JR30	Roof Built-Up from Base of Pipe from Upper Roof, West Side of Building	Misc.	No	NF		ND		X	

Inspected by: **Javier Medina**

Date: **10/6/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/6/2021**

Structure: **Ceiba Readiness**
 Page: **6** of **6**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
JR31	Roof Built-Up from Center Area, Upper Roof of Building	Misc.	No	NF		ND		X	

Inspected by: **Javier Medina**

Date: **10/6/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/11/2021**

Structure: **Ceiba Readiness**
 Page: **1** of **3**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
AR-1	Roof Built-Up from NGX Building Area	Misc.	No	NF	NGX Roof	ND		X	
AR-2	Roof Built-Up from NGX Building Area	Misc.	No	NF	NGX Roof	ND		X	
AR-3	Roof Built-Up from NGX Building Area	Misc.	No	NF	NGX Roof	ND		X	
AR-4	Roof Flashing from NGX Building Area	Misc.	No	NF	NGX Roof	ND		X	
AR-5	Roof Flashing from NGX Building Area	Misc.	No	NF	NGX Roof	ND		X	
AR-6	Roof Flashing from NGX Building Area	Misc.	No	NF	NGX Roof	ND		X	

Inspected by: **Javier Medina**

Date: **10/11/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/11/2021**

Structure: **Ceiba Readiness**
 Page: **2** of **3**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
AR-7	Gypsum Board Wall from Exterior Women Bathroom	Misc.	No	NF	Exterior Women Bathroom NGX Shop	ND		X	
AR-8	Gypsum Board Wall from Exterior Women Bathroom	Misc.	No	NF	Exterior Women Bathroom NGX Shop	ND		X	
AR-9	Gypsum Board Wall from NGX Shop Office	Misc.	No	NF	Exterior Women Bathroom NGX Shop	ND		X	
AR-10	Cream Vinyl Floor Tile 12"x 12" from NGX Shop Office Area	Misc.	No	NF	NGX Shop	ND		X	
AR-11	Cream Vinyl Floor Tile 12"x 12" from NGX Shop, Break Room	Misc.	No	NF	NGX Shop	ND		X	
AR-12	Cream Vinyl Floor Tile 12"x 12" from NGX Shop, Storage	Misc.	No	NF	NGX Shop	ND		X	

Inspected by: **Javier Medina**

Date: **10/11/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Puerto Rico National Guard**
 Project Name: **Ceiba Readiness Center**
 Inspection Date: **10/11/2021**

Structure: **Ceiba Readiness**
 Page: **3** of **3**

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7,X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
AR-13	Vinyl Baseboard 3" from NGX Shop, Office Area	Misc.	No	NF	NGX Shop	ND		X	
AR-14	Vinyl Baseboard 3" from NGX Shop, Break Room	Misc.	No	NF	NGX Shop	ND		X	
AR-15	Vinyl Baseboard 3" from NGX Shop, Storage	Misc.	No	NF	NGX Shop	ND		X	

Inspected by: **Javier Medina**

Date: **10/11/2021**

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged or significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM or non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

* - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected

Appendix III





ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Client Sample ID					
B21100022.01	Hard, Compact, Partly Granular	No		Cellulose 2	Sand/Aggregates 20
B21100022.01.A	with				Glue 4
JR1	Other - Glue and Fibers				Binders/Paint 74
Layer % of Total :	Gray				

Date Analyzed: 10/12/2021

Sample Location: Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Entrance

Comments:

B21100022.01	Hard, Compact, Partly Granular	Yes	Chrysotile 3		Bitumen 6
B21100022.01.B	with				Sand/Aggregates 25
JR1	Other - Black Mastic and Fibers				Binders/Paint 66
Layer % of Total :	Cream				

Date Analyzed: 10/12/2021

Sample Location: Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Entrance

Comments:

Asbestos Found in Bitumen

B21100022.02	Hard, Compact, Partly Granular	No		Cellulose 1	Sand/Aggregates 26
B21100022.02.A	Other - with Glue and Fibers				Glue 6
JR2	Gray				Binders/Paint 67
Layer % of Total :					

Date Analyzed: 10/12/2021

Sample Location: Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Hallway Area

Comments:

B21100022.02	Hard, Compact, Partly Granular	Yes	Chrysotile 2		Bitumen 5
B21100022.02.B	with				Sand/Aggregates 25
JR2	Other - Black Mastic and Fibers				Binders/Paint 68
Layer % of Total :	Cream				

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Client Sample ID					

Date Analyzed: 10/12/2021

Sample Location: Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Hallway Area

Comments:

Asbestos Found in Bitumen

B21100022.03	Hard, Compact, Partly Granular	No		Cellulose 2	Sand/Aggregates 25
B21100022.03.A	with				Glue 5
JR3	Other - Glue and Fibers				Binders/Paint 68
	Gray				

Layer % of Total :

Date Analyzed: 10/12/2021

Sample Location: Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Supply Office

Comments:

B21100022.03	Hard, Compact, Partly Granular	Yes	Chrysotile 2		Bitumen 8
B21100022.03.B	with				Sand/Aggregates 26
JR3	Other - Black Mastic and Fibers				Binders/Paint 64
	Cream				

Layer % of Total :

Date Analyzed: 10/12/2021

Sample Location: Gray VFT with Brown Glue and Cream Layer Under with Black Glue from Supply Office

Comments:

Asbestos Found in Bitumen

B21100022.04	Hard, Rubber with Glue	No		Cellulose 2	Rubber 84
B21100022.04.A	Other - Paint and Fibers				Glue 8
JR4	Black				Binders/Paint 6

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Brown Baseboard with Brown Glue

Comments:

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Paint Included as Binders					
B21100022.05 B21100022.05.A JR5 Layer % of Total :100%	Hard, Rubber with Glue and Fibers Black	No		Cellulose 3	Rubber 91 Glue 6
Date Analyzed: 10/12/2021 Sample Location: Brown Baseboard with Brown Glue Comments:					
B21100022.06 B21100022.06.A JR6 Layer % of Total :100%	Hard, Rubber with Glue, Paint and Fibers Black	No		Cellulose 3	Rubber 85 Glue 6 Binders/Paint 6
Date Analyzed: 10/12/2021 Sample Location: Brown Baseboard with Brown Glue Comments:					
Paint Included as Binder					
B21100022.07 B21100022.07.A JR7 Layer % of Total :100%	Semi-Hard, Bituminous with Fibers and Aluminum Black	Yes	Chrysotile 4	Cellulose 6 Glass Fibers 10	Aluminum 6 Bitumen 74
Date Analyzed: 10/12/2021 Sample Location: Sealant from AC Ducts in Classroom Comments:					

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B21100022.08 B21100022.08.A JR8 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: Sealant from AC Ducts in Classroom Comments:	Semi-Hard, Bituminous with Fibers and Aluminum Black	Yes	Chrysotile 3	Cellulose 6 Glass Fibers 10	Aluminum 6 Bitumen 75
B21100022.09 B21100022.09.A JR9 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: Sealant from AC Ducts in Classroom Comments:	Semi-Hard, Bituminous with Fibers and Aluminum Black	Yes	Chrysotile 3	Glass Fibers 12 Cellulose 6	Aluminum 6 Bitumen 73
B21100022.10 B21100022.10.A JR10 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: Mastic under Ceramic Floor Tile, Administration Area Comments: Asbestos Found in Bitumen and Ceramic Included as Binders	Hard, Ceramic With Aggregates Other - Mastic and Fibers Cream	Yes	Chrysotile 2	Cellulose 2	Bitumen 8 Sand/Aggregates 15 Binders/Paint 73
B21100022.11 B21100022.11.A JR11 Layer % of Total :100%	Semi-Hard, Silty with Glue Other - Paint and Fibers Cream	No		Cellulose 12 Synthetic 6	Glue 10 Binders/Paint 72

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Client Sample ID					

Date Analyzed: 10/12/2021

Sample Location: Gypsum Sample with Plaster from Wall in Administration Area

Comments:

Paint Included as Binder

B21100022.12	Semi-Hard, Silty with Glue	No		Cellulose 10	Glue 10
B21100022.12.A	Other - Paint and Fibers			Synthetic 6	Binders/Paint 74
JR12	Cream				

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Gypsum Sample with Plaster from Wall in Administration Area

Comments:

Paint Included as Binder

B21100022.13	Semi-Hard, Silty with Glue	No		Synthetic 6	Glue 10
B21100022.13.A	Other - Paint and Fibers			Cellulose 6	Binders/Paint 78
JR13	Cream				

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Gypsum Board Wall from Administration Area

Comments:

Paint Included as Binder

B21100022.14	Hard, Glue with Paint and Fibers	No		Cellulose 2	Glue 90
B21100022.14.A	Cream			Synthetic 2	Binders/Paint 6
JR14					

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Wood Baseboard Caulking, Administration Area

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
---------------	--------------------	-------------------	-----------------	--------------	------------------------

Comments:

Paint Included as Binder

B21100022.15	Hard, Glue with Paint and Fibers	No		Cellulose 2	Glue 85
B21100022.15.A	Cream			Synthetic 3	Binders/Paint 10

JR15

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Wood Baseboard Caulking, Administration Area

Comments:

Paint Included as Binder

B21100022.16	Hard, Glue with Paint and Fibers	No		Cellulose 2	Glue 86
B21100022.16.A	Cream			Synthetic 2	Binders/Paint 10

JR16

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Wood Baseboard Caulking, Administration Area

Comments:

Paint Included as Binder

B21100022.17	Soft, Silty to Fibrous, to Perlite	No		Cellulose 25	Perlite 10
B21100022.17.A	Other - Expanded Glass with			Glass Fibers 10	Expanded Glass 10
JR17	Paint			Synthetic 10	Binders/Paint 35
	Lt. Gray				

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: White Ceiling Tile 2'x 4' from Classroom Area

Comments:

Paint Included as Binder

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B21100022.18 B21100022.18.A JR18 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: White Ceiling Tile 2'x 4' from Entrance Area Comments: Paint Included as Binder	Soft, Silty to Fibrous to Perlitic Other - Expanded Glass with Paint Lt. Gray	No		Cellulose 15 Glass Fibers 10 Synthetic 6	Expanded Glass 10 Perlite 10 Binders/Paint 49
B21100022.19 B21100022.19.A JR19 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: White Ceiling Tile 2'x 4' from Hallway Area Comments: Paint Included as Binder	Soft, Silty to Fibrous to Perlitic Other - Expanded Glass with Paint Lt. Gray	No		Cellulose 10 Glass Fibers 15 Synthetic 6	Perlite 10 Expanded Glass 12 Binders/Paint 47
B21100022.20 B21100022.20.A JR20 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: Cream Vinyl Floor Tile 12"x 12" with Brown Glue, Store Office Area Comments:	Hard, Compact, Partly Granular Other - with Glue and Fibers Gray	No		Cellulose 2	Sand/Aggregates 24 Glue 6 Binders/Paint 68

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B21100022.21 B21100022.21.A JR21 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: Cream Vinyl Floor Tile 12"x 12" with Brown Glue from Break Room Area Comments:	Hard, Compact, Partly Granular Other - with Glue and Fibers Gray	No		Cellulose 2	Sand/Aggregates 25 Glue 5 Binders/Paint 68
B21100022.22 B21100022.22.A JR22 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: Cream Vinyl Floor Tile 12"x 12" with Brown Glue from Mech Room Comments:	Hard, Compact, Partly Granular Other - with Glue and Fibers Gray	No		Cellulose 2	Sand/Aggregates 28 Glue 5 Binders/Paint 65
B21100022.23 B21100022.23.A JR23 Layer % of Total :100% Date Analyzed: 10/12/2021 Sample Location: Roof Flashing from East Side, Lower Roof in Front of Parking Area Comments: Paint Included as Binder	Hard, Bitumen with Paint, Perlitic and Fibers Black	No		Cellulose 4 Glass Fibers 6	Perlite 12 Bitumen 68 Binders/Paint 10
B21100022.24 B21100022.24.A JR24 Layer % of Total :100%	Hard, Bituminous with Paint, Aggregates Other - Foam and Fibers Black	No		Cellulose 2 Glass Fibers 6	Foam 12 Bitumen 64 Sand/Aggregates 10 Binders/Paint 6

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
---------------	--------------------	-------------------	-----------------	--------------	------------------------

Date Analyzed: 10/12/2021

Sample Location: Roof Flashing from Center, Lower Roof in Front of Parking Area

Comments:

Paint included as Binders

B21100022.25	Hard, Bitumen with Paint and	No		Cellulose 2	Bitumen 83
B21100022.25.A	Fibers			Glass Fibers 5	Binders/Paint 10
JR25	Black				

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Roof Built-Up from Base of Pipe on Lower Roof in Front of Parking Area

Comments:

Paint included as Binders

B21100022.26	Hard, Bitumen with Foam and	Yes	Chrysotile 3	Cellulose 2	Foam 10
B21100022.26.A	Fibers			Glass Fibers 2	Bitumen 83
JR26	Black				

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Roof Flashing from North Side of Lower Roof (Front Building) in Front of Road #3

Comments:

B21100022.27	Hard, Bitumen with Aluminum	No		Cellulose 2	Aluminum 10
B21100022.27.A	and Fibers			Glass Fibers 3	Bitumen 85
JR27	Black				

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Roof Built-Up from Base of AC Machine, Lower Roof in Front of Road #3

Comments:

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B21100022.28 B21100022.28.A JR28	Hard, Bitumen with Paint, Foam and Fibers Black	No		Cellulose 3 Glass Fibers 2	Foam 15 Bitumen 74 Binders/Paint 6

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Roof Built-Up from Base of AC Machine, Lower Roof in Front of Road #3 (Center)

Comments:

Paint included as Binders

B21100022.29 B21100022.29.A JR29	Hard, Bituminous with Aluminum, Paint Other - and Fibers Black	No		Cellulose 2 Glass Fibers 3	Aluminum 6 Bitumen 83 Binders/Paint 6
-----------------------------------------------	-------------------------------------------------------------------	----	--	-------------------------------	---------------------------------------------

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Roof Flashing from Upper Roof, West Side of Building

Comments:

Paint included as Binders

B21100022.30 B21100022.30.A JR30	Hard, Bituminous with Fibers Black	No		Cellulose 3 Glass Fibers 3	Bitumen 94
-----------------------------------------------	---------------------------------------	----	--	-------------------------------	------------

Layer % of Total :100%

Date Analyzed: 10/12/2021

Sample Location: Roof Built-Up from Base of Pipe from Upper Roof, West Side of Building

Comments:

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100022



REPORT NUMBER



RP21101904

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/06/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/08/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B21100022.31 B21100022.31.A JR31 Layer % of Total :100%	Hard, Bitminuos with Aggregates, Paint Other - Foam and Fibers Black	No		Cellulose 3 Glass Fibers 6	Bitumen 73 Sand/Aggregates 10 Binders/Paint 8

Date Analyzed: 10/12/2021

Sample Location: Roof Built-Up from Center Area, Upper Roof of Building

Comments:

Paint included as Binders

Comments:

For all heterogeneous and layered samples easily separated into sublayers, each component is analyzed and reported separately.

Samples are analyzed by PLM using dispersion staining techniques in accordance with US EPA methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, IN

611 Monserrate, 2nd. Floor, Santurce, P.R. 00907

Ph: (787) 722-0220 Fax: (787) 724-5788



Transmittal Sheet for Bulk Sample Analysis

Client Name: Puerto Rico National Guard

Address:

Contact:

Phone/Fax:

Ileana Mejias

(787) 396-2125

Project Name: PR National Guard Ceiba Facility

Site Location: Ceiba, Puerto Rico

Samplers Name: Javier Medina

Company: AESI

Chain of Custody Record

Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Collected		Analysis Required		Comments	Laboratory I.D.
		Date	Time	PLM	Other		
JR1	See tagged agreement	10/16/2021		✓			
JR2				✓			
JR3				✓			
JR4				✓			
JR5				✓			
JR6				✓			
JR7				✓			
JR8				✓			
JR9				✓			
JR10				✓			
JR11				✓			
JR12				✓			

Turnaround Time:

Normal: ☐Rush: ☐

Relinquished By: <u>Javier Medina</u>	Delivered Directly to Lab: <input type="checkbox"/>	Shipped: <input type="checkbox"/>
Date/ Time: <u>10/18/21 7:00</u>	Method of Shipment:	
Received By: <u>Nancy Torres</u>	Lab. Recipient:	
Date/ Time: <u>10/18/21 7:00</u>	Date:	
Relinquished By:	*Job ID: B21100022	
Date/ Time:		
Received By:	National Guard (PRARNG)	
Date/ Time:		

COC-BULK-011/REV2/16

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, IN

611 Monserrate, 2nd. Floor, Santurce, P.R. 00907

Ph: (787) 722-0220 Fax: (787) 724-5788



Transmittal Sheet for Bulk Sample Analysis

Client Name: Puerto Rico National Guard

Address:

Contact: Ileana Mejias

Phone/Fax: (787) 396-2125

Project Name: PR National Guard Ceiba Facility

Site Location: Ceiba, Puerto Rico

Samplers Name: Javier Medina

Company: AESI

Chain of Custody Record

Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Collected		Analysis Required		Comments	Laboratory I.D.
		Date	Time	PLM	Other		
JR13	See tagged assessment ↓	10/6/2021		✓			
JR14				✓			
JR15				✓			
JR16				✓			
JR17				✓			
JR18				✓			
JR19				✓			
JR20				✓			
JR21				✓			
JR22				✓			
JR23				✓			
JR24				✓			

Turnaround Time:

Normal: Rush:

Relinquished By: <u>Javier Medina Rora</u>	Delivered Directly to Lab: <input type="checkbox"/>	Shipped: <input type="checkbox"/>
Date/ Time: <u>10/8/21 7:00</u>	Method of Shipmen	
Received By: <u>Javier Medina</u>	Lab. Recipient:	
Date/ Time: <u>10/8/21 7:00</u>	Date:	
Relinquished By:	<p>*Job ID: B21100022</p> <p>National Guard (PRARNG)</p>	
Date/ Time:		
Received By:		
Date/ Time:		

COC-BULK-011/REV2/16

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, IN

611 Monserrate, 2nd. Floor, Santurce, P.R. 00907

Ph: (787) 722-0220 Fax: (787) 724-5788



Transmittal Sheet for Bulk Sample Analysis

Client Name: Puerto Rico National Guard

Address:

Contact: Ileana Mejias

Phone/Fax: (787) 396-2125

Project Name: PR National Guard Ceiba Facility

Site Location: Ceiba, Puerto Rico

Samplers Name: Javier Medina

Company: AESI

Chain of Custody Record

Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Collected		Analysis Required		Comments	Laboratory I.D.
		Date	Time	PLM	Other		
JR25	see tagged assessment ↓	10/6/2021		✓			
JR26				✓			
JR27				✓			
JR28				✓			
JR29				✓			
JR30				✓			
JR31				✓			

Turnaround Time:

Normal: Rush:

Relinquished By: <u>Javier Medina Rom</u>	Delivered Directly to Lab: <input type="checkbox"/>	Shipped: <input type="checkbox"/>
Date/ Time: <input type="text"/>		
Received By: <input type="text"/>	Method of Shipment:	
Date/ Time: <input type="text"/>		
Relinquished By: <input type="text"/>	Lab. Recipient:	
Date/ Time: <input type="text"/>		
Received By: <input type="text"/>	Date: <input type="text"/>	
Date/ Time: <input type="text"/>		

*Job ID: B21100022



National Guard (PRARNG)



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100062



REPORT NUMBER



RP21102236

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/11/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/19/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Client Sample ID					
B21100062.01	Hard, Bituminous with Foam,	No		Cellulose 2	Aluminum 8
B21100062.01.A	Aluminum and Fibers			Glass Fibers 3	Foam 15
AR-1	Black				Bitumen 72

Layer % of Total :100%

Date Analyzed: 10/21/2021

Sample Location: Roof Built-Up from NGX Building Area

Comments:

B21100062.02	Hard, Bituminous with Foam,	No		Cellulose 2	Aluminum 8
B21100062.02.A	Aluminum and Fibers			Glass Fibers 5	Foam 10
AR-2	Black				Bitumen 75

Layer % of Total :100%

Date Analyzed: 10/21/2021

Sample Location: Roof Built-Up from NGX Building Area

Comments:

B21100062.03	Hard, Bituminous with Foam,	No		Cellulose 3	Foam 10
B21100062.03.A	Aluminum and Fibers			Glass Fibers 5	Aluminum 10
AR-3	Black				Bitumen 72

Layer % of Total :100%

Date Analyzed: 10/21/2021

Sample Location: Roof Built-Up from NGX Building Area

Comments:

B21100062.04	Hard, Bituminous with Perlite,	No		Cellulose 2	Perlite 10
B21100062.04.A	Aluminum and Fibers			Glass Fibers 25	Aluminum 5
AR-4	Black				Bitumen 58

Layer % of Total :100%

Date Analyzed: 10/21/2021

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100062



REPORT NUMBER



RP21102236

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/11/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/19/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Sample Location: Roof Flashing from NGX Building Area					
Comments:					
B21100062.05 B21100062.05.A AR-5	Hard, Bituminous with Perlite, Aluminum and Fibers Black	No		Cellulose 3 Glass Fibers 20	Perlite 10 Aluminum 5 Bitumen 62
Layer % of Total :100%					
Date Analyzed: 10/21/2021					
Sample Location: Roof Flashing from NGX Building Area					
Comments:					
B21100062.06 B21100062.06.A AR-6	Hard, Bituminous with Foam, Aluminum and Fibers Black	No		Cellulose 2 Glass Fibers 2	Aluminum 8 Foam 10 Bitumen 78
Layer % of Total :100%					
Date Analyzed: 10/21/2021					
Sample Location: Roof Flashing from NGX Building Area					
Comments:					
B21100062.07 B21100062.07.A AR-7	Semi-Hard, Silty with Fibers Cream	No		Cellulose 12 Synthetic 6	Binders/Paint 82
Layer % of Total :100%					
Date Analyzed: 10/21/2021					
Sample Location: Gypsum Board Wall from Exterior Women Bathroom					
Comments:					

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100062



REPORT NUMBER



RP21102236

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/11/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/19/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Client Sample ID					
B21100062.08	Semi-Hard, Silty with Fibers	No		Cellulose 12	Binders/Paint 78
B21100062.08.A	Cream			Synthetic 10	

AR-8

Layer % of Total :100%

Date Analyzed: 10/21/2021

Sample Location: Gypsum Board Wall from Exterior Women Bathroom

Comments:

B21100062.09	Semi-Hard, Silty with Fibers	No		Cellulose 10	Binders/Paint 84
B21100062.09.A	Cream			Synthetic 6	

AR-9

Layer % of Total :100%

Date Analyzed: 10/21/2021

Sample Location: Gypsum Board Wall from NGX Shop Office

Comments:

B21100062.10	Hard, Compact, Partly Granular with Glue	No		Cellulose 2	Sand/Aggregates 25
B21100062.10.A	Other - and Fibers				Glue 6
AR-10	Gray				Binders/Paint 67

Layer % of Total :100%

Date Analyzed: 10/21/2021

Sample Location: Cream Vinyl Floor Tile 12"x 12" from NGX Shop Office Area

Comments:

B21100062.11	Hard, Compact, Partly Granular with Glue	No		Cellulose 2	Sand/Aggregates 25
B21100062.11.A	Other - and Fibers				Glue 6
AR-11	Gray				Binders/Paint 67

Layer % of Total :100%

Date Analyzed: 10/21/2021

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100062



REPORT NUMBER



RP21102236

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/11/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/19/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Sample Location: Cream Vinyl Floor Tile 12"x 12" from NGX Shop, Break Room					
Comments:					
B21100062.12 B21100062.12.A AR-12	Hard, Compact, Partly Granular with Glue Gray	No		Cellulose 2	Sand/Aggregates 26 Glue 6 Binders/Paint 66
Layer % of Total :100%					
Date Analyzed: 10/21/2021					
Sample Location: Cream Vinyl Floor Tile 12"x 12" from NGX Shop, Storage					
Comments:					
B21100062.13 B21100062.13.A AR-13	Hard, Rubber with Paint, Glue and Fibers Black	No		Cellulose 3	Rubber 82 Glue 7 Binders/Paint 8
Layer % of Total :100%					
Date Analyzed: 10/21/2021					
Sample Location: Vinyl Baseboard 3" from NGX Shop, Office Area					
Comments:					
Paint Included as Binders					
B21100062.14 B21100062.14.A AR-14	Hard, Rubber with Paint, Glue and Fibers Black	No		Cellulose 2	Rubber 82 Glue 8 Binders/Paint 8
Layer % of Total :100%					
Date Analyzed: 10/21/2021					
Sample Location: Vinyl Baseboard 3" from NGX Shop, Break Room					
Comments:					
Paint Included as Binders					

MICROANALYST:

[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.



ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907

PH. (787) 722-0220 Fax (787) 724-5788

Job ID: B21100062



REPORT NUMBER



RP21102236

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	National Guard (PRARNG)	Date Collected:	10/11/2021
Project Name:	Ceiba Readiness Center, Ceiba	Date Received:	10/19/2021
Project ID:			

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
Client Sample ID B21100062.15 B21100062.15.A AR-15	Hard, Rubber with Paint, Glue and Fibers Black	No		Cellulose 2	Rubber 85 Glue 8 Binders/Paint 5

Layer % of Total :100%

Date Analyzed: 10/21/2021

Sample Location: Vinyl Baseboard 3" from NGX Shop, Storage

Comments:

Paint Included as Binders

Comments:

For all heterogeneous and layered samples easily separated into sublayers, each component is analyzed and reported separately.

Samples are analyzed by PLM using dispersion staining techniques in accordance with US EPA methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

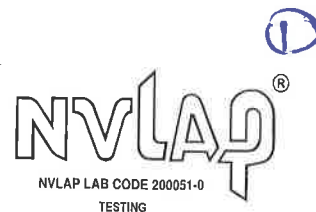
MICROANALYST:


[Elme Rivera]

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, IN
611 Monserrate, 2nd. Floor, Santurce, P.R. 00907

Ph: (787) 722-0220 Fax: (787) 724-5788



Transmittal Sheet for Bulk Sample Analysis

Client Name: Puerto Rico Army National Guard

Address: _____

Contact: Ileana Mejias

Phone/Fax: _____

Project Name: Ceiba Readiness Center

Site Location: Ceiba, Puerto Rico

Samplers Name: Anthony Rivera

Company: AESI

Chain of Custody Record

Sample I. D.	Sample Description (i.e. Location, Name, etc.)	Collected		Analysis Required		Comments	Laboratory I.D.
		Date	Time	PLM	Other		
AL-1	See HHC-12 Assessment	10/11/21		-			
AL-2				-			
AL-3				-			
AL-4				-			
AL-5				-			
AL-6				-			
AL-7				-			
AL-8				-			
AL-9				-			
AL-10				-			
AL-11				-			
AL-12				-			

Turnaround Time:

Normal: ☐

Rush: ☐

Relinquished By:	Delivered Directly to Lab: <input type="checkbox"/>	Shipped: <input type="checkbox"/>
Date/ Time: <u>10/11/21</u>	Method of Shipment:	
Received By: <u>My Walker</u>	Lab. Recipient:	
Date/ Time: <u>10/19/21 9:00 AM</u>	Date:	
Relinquished By:	Job ID: B21100062	
Date/ Time:		
Received By:	National Guard (PRARNG)	
Date/ Time:		

Transmittal Sheet for Bulk Sample Analysis

Client Name: Puerto Rico Army National Guard

Address:

Contact: Ileana Mejias

Phone/Fax:

Project Name: Ceiba Readiness Center

Site Location: Ceiba, Puerto Rico

Samplers Name: Anthony Rivera

Company: **AESI**


Chain of Custody Record

[illegible]

Turnaround Time:

Normal:

Rush: ☐

Relinquished By: _____	Delivered Directly to Lab: <input type="checkbox"/> Shipped: <input type="checkbox"/>
Date/ Time: _____	Method of Shipment: _____ Lab. Recipient: _____ Date: _____
Received By: _____	
Date/ Time: _____	
Relinquished By: _____	
Date/ Time: _____	<div style="font-size: 1.2em; font-weight: bold; margin-bottom: 10px;">Job ID: B21100062</div>  <div style="margin-top: 10px;">National Guard (PRARNG)</div>
Received By: _____	
Date/ Time: _____	

Job ID:B21100062



National Guard (PRARNG)

Appendix IV



Selective Photos



**General View of Ceiba Readiness Center
Ceiba, Puerto Rico**



Typical Asbestos Containing VFT/Mastic



**Typical Asbestos Containing Mastic
on HVAC Ducts present in Classroom
and Administration Area**

Selective Photos

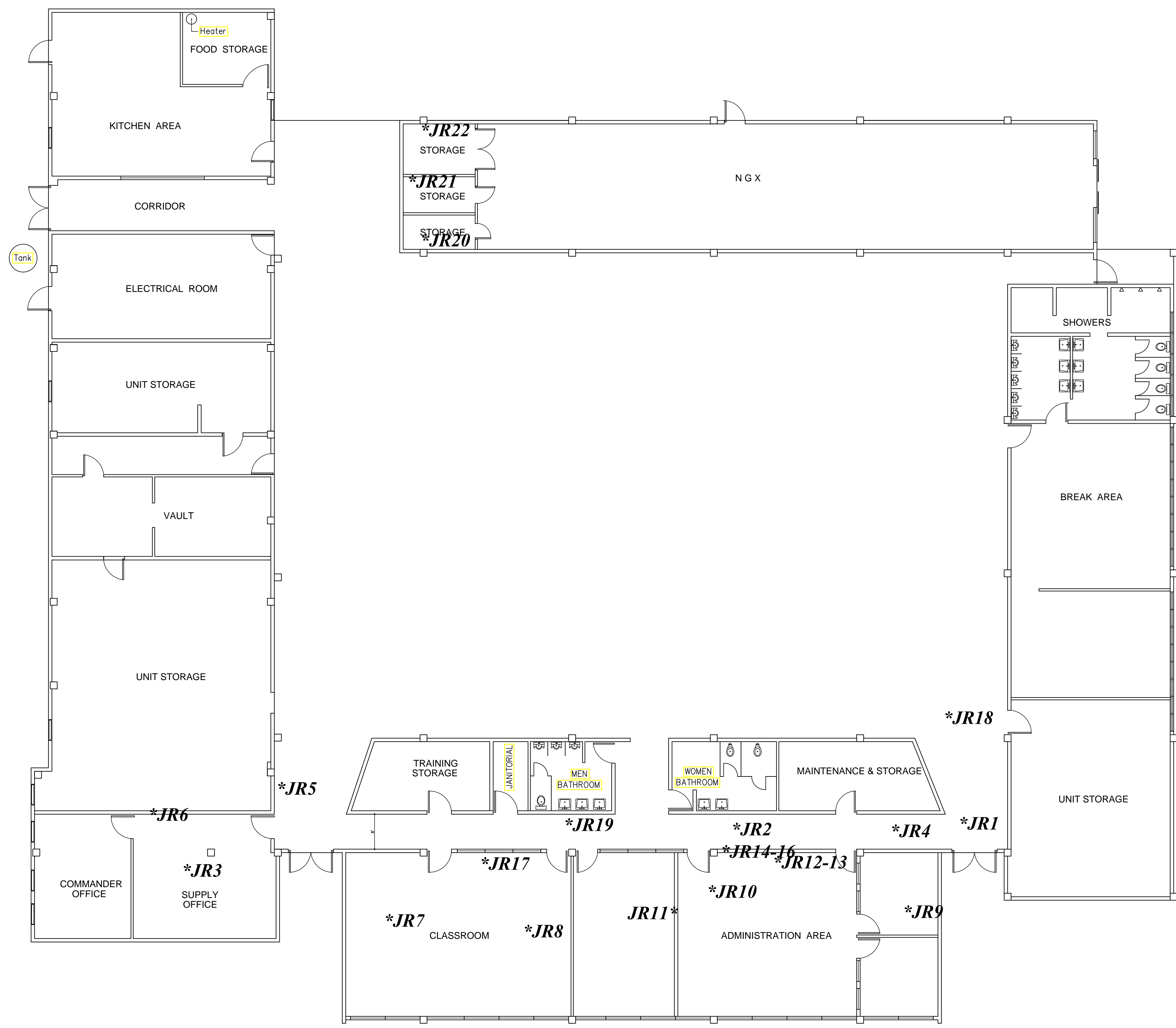


Asbestos Containg Roof Flashing

Appendix V



Schematic Location of Bulk Sampling Points (10/6/21) at Ceiba Readiness Center, Ceiba, PR



Floor Plan
Scale: 1/8"=1'-0"

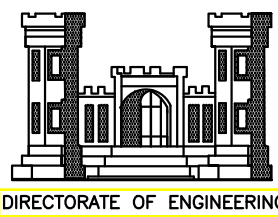
DESIGN BY:

DRAWN BY:

VERIFIED BY:

SCALE:
AS NOTED

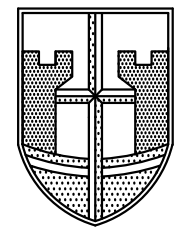
DATE:



PROJECT:
PUERTO RICO ARMY NATIONAL GUARD
DIRECTORATE OF ENGINEERING
P.O. BOX 3786 SAN JUAN PUERTO RICO 00904 - 3786

SHEET TITLE:
CEIBA READINESS CENTER

FLOOR PLAN



P
R
A
R
N
G

NO.

DESCRIPTION

DATE

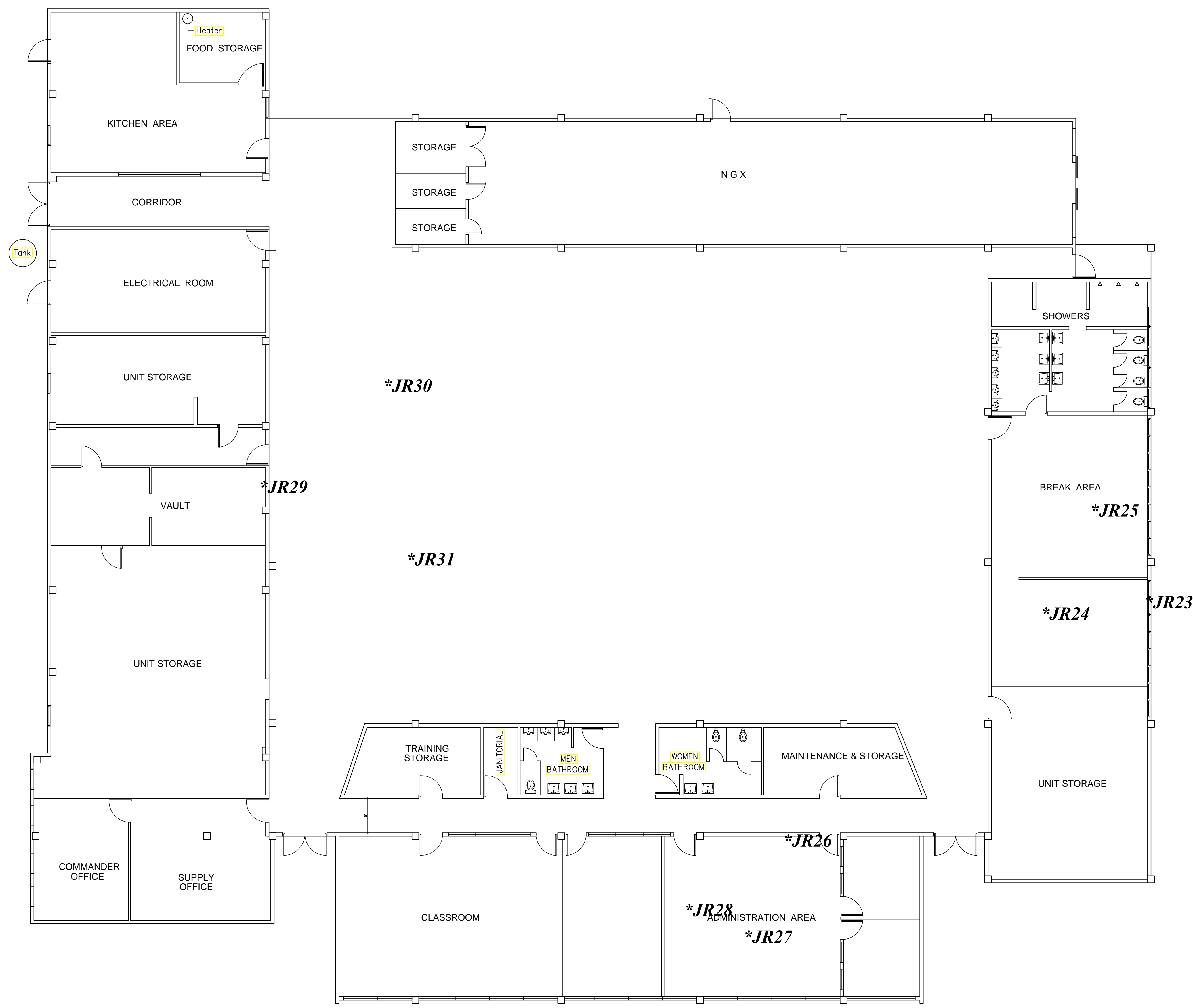
REVISIONS

SHEET NUMBER:
1

TOTAL SHEET:
1

SHEET NAME:
A-1

Schematic Location of Bulk Sampling Points -Roof (10/6/21) at Ceiba Readiness Center, Ceiba, PR



Floor Plan
Scale: 1/8"=1'-0"

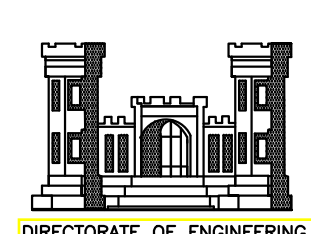
DESIGN BY:

DRAWN BY:

VERIFIED BY:

SCALE:
AS NOTED

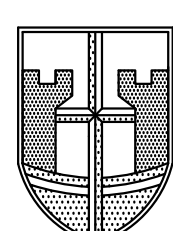
DATE:



PUERTO RICO ARMY NATIONAL GUARD
DIRECTORATE OF ENGINEERING
P.O. BOX 3786 SAN JUAN PUERTO RICO 00904 - 3786

PROJECT:
CEIBA READINESS CENTER

SHEET TITLE:
FLOOR PLAN



P
R
A
R
N
G

NO.

DESCRIPTION

DATE

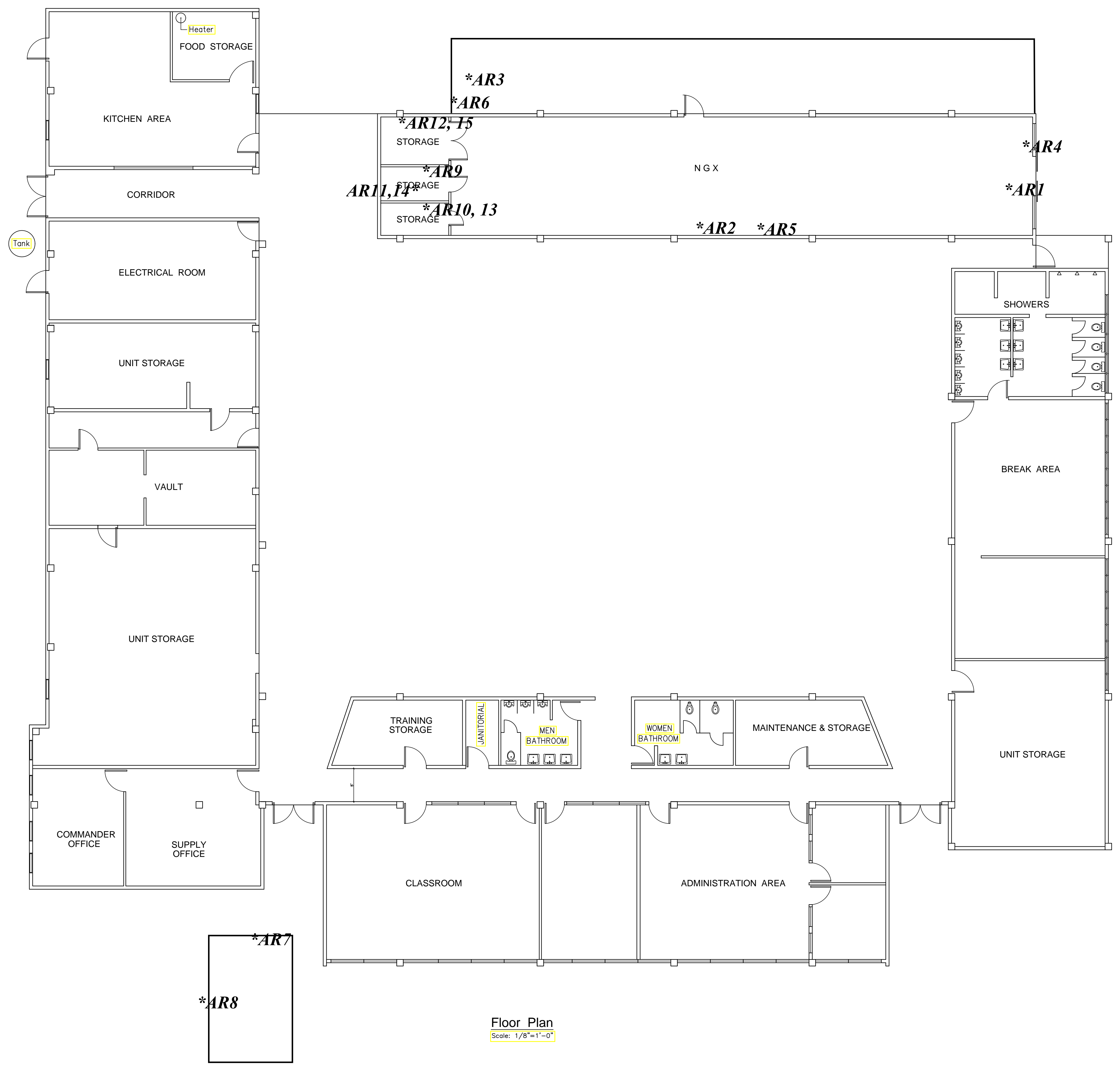
REVISIONS

SHEET NUMBER:
1
OF
1

TOTAL SHEET:

SHEET NAME:
A-1

Schematic Location of Bulk Sampling Points (10/11/21) at Ceiba Readiness Center, Ceiba, PR



Floor Plan
Scale: 1/8"=1'-0"

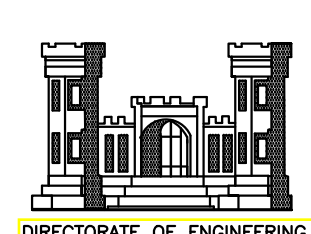
DESIGN BY:

DRAWN BY:

VERIFIED BY:

SCALE:
AS NOTED

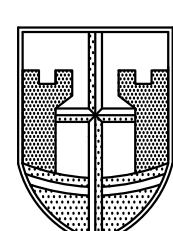
DATE:



PROJECT:
PUERTO RICO ARMY NATIONAL GUARD
DIRECTORATE OF ENGINEERING
P.O. BOX 3786 SAN JUAN PUERTO RICO 00904 - 3786

Ceiba Readiness Center

FLOOR PLAN



P
R
A
R
N
G

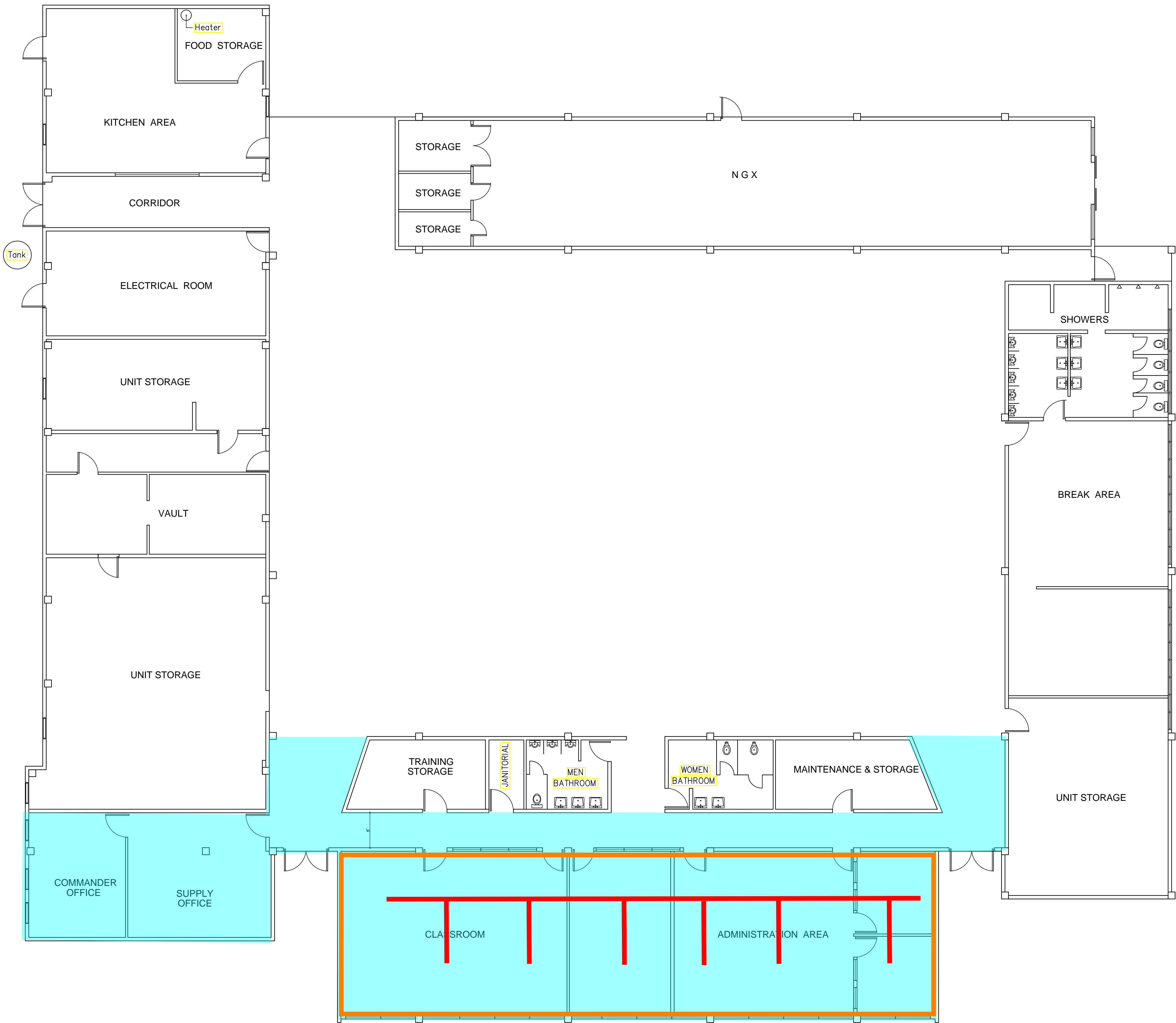
NO.	DESCRIPTION	DATE

REVISIONS

SHEET NUMBER:
1
OF
1

SHEET NAME:
A-1

Schematic Distribution of ACM at Ceiba Readiness Center, Ceiba, PR



Floor Plan
Scale: 1/8"=1'-0"

- Legend:
- Asbestos Containing Roof Flashing
 - Asbestos Containing Vinyl Floor Tile/Mastic
**Mastic present under ceramic floor tile
 - Asbestos Containing Sealant on HVAC Ducts

DESIGN BY:

DRAWN BY:

VERIFIED BY:

SCALE:
AS NOTED

DATE:

DIRECTORATE OF ENGINEERING

PROJECT:
PUERTO RICO ARMY NATIONAL GUARD
DIRECTORATE OF ENGINEERING
P.O. BOX 3786 SAN JUAN PUERTO RICO 00904 - 3786

SHEET TITLE:
CEIBA READINESS CENTER

FLOOR PLAN

PUERTO RICO ARMY NATIONAL GUARD

P
R
A
R
N
G

DATE

DESCRIPTION

N.O.

REVISIONS

SHEET NUMBER:
1

TOTAL SHEET:
1

SHEET NAME:
A-1

EXHIBIT G: PRARNG Environmental Policy



PUERTO RICO NATIONAL GUARD
THE ADJUTANT GENERAL OFFICE
552 BORINQUEÑER STREET
FORT BUCHANAN, PR 00934

NGPR-Z

9 November 2020

MEMORANDUM FOR ALL PERSONNEL OF THE PUERTO RICO ARMY NATIONAL GUARD

SUBJECT: Environmental Policy Statement


1. The Puerto Rico Army National Guard is a versatile organization of educated, disciplined and well-trained Citizen Soldiers committed to accomplish those missions that are in the best interests of our Nation, State and community.
2. Personnel in this organization are subject to federal, state and local environmental laws and regulations. They must ensure they fully understand and conform to these laws and regulations.
3. The Puerto Rico Army National Guard is committed to protect and preserve our physical environment utilizing environmentally sound standards and practices.
4. Through the adoption of this Policy, the Puerto Rico Army National Guard will:
 - a. Support the military mission by identifying management actions required to protect and conserve natural and cultural resources and provide sustained use of the training lands.
 - b. Be an environmentally responsible neighbor in the communities where we operate, and act promptly and responsibly to correct incidents or conditions that endanger human health or the environment.
 - c. Comply with all applicable Federal, State and local environmental laws and regulations, and those other requirements to which we subscribe.
 - d. Consider environmental requirements and impacts early in our planning process as they relate to military training, equipment fielding and construction projects.
 - e. Clean-up any contaminated sites as quickly as resources permit.
 - f. Continually improve pollution reduction strategies through the application of innovative processes and technologies.

NGPR-Z
SUBJECT: ENVIRONMENTAL POLICY STATEMENT

5. Every employee, contractor and tenant of the Puerto Rico Army National Guard is expected to adhere to the provisions set forth in this policy. Managers at all levels are expected to oversee the implementation of this policy in their respective areas of responsibility.

6. Previous Policy Statement, 27 August 2019, is rescinded. A copy of this policy statement will be permanently posted on all bulletin boards.

7. Point of contact is 1LT David Santiago, PRARNG Environmental Manager, at (787) 421-8605, or email david.santiagohernandez.mil@mail.mil.



JOSE J. REYES
Major General (PR), PRNG
The Adjutant General

DISTRIBUTION:

A

EXHIBIT H: Technical Specifications

TABLE OF CONTENTS

<u>SECTION</u>	<u>DESCRIPTION</u>
DIVISION 01	GENERAL REQUIREMENTS
01 32 16	Small Project Construction Progress Schedule
01 33 00	Submittal Procedures
DIVISION 08	OPENINGS
08 51 13	Aluminum Windows
08 71 00	Door Hardware
DIVISION 09	FINISHES
09 51 00	Acoustical Ceilings
09 90 00	Paints and Coatings

SECTION 01 32 16.00 20

SMALL PROJECT CONSTRUCTION PROGRESS SCHEDULES

02/15

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Construction Schedule; G[, [_____]]

SD-07 Certificates

Monthly Updates

1.2 ACCEPTANCE

Prior to the start of work, prepare and submit to the Contracting Officer for acceptance a construction schedule in the form of a [Network Analysis Schedule (NAS)] [Bar Chart Schedule] in accordance with the terms in Contract Clause FAR 52.236-15 Schedules for Construction Contracts, except as modified in this contract.

The acceptance of a Baseline Construction Schedule is a condition precedent to:

- a. The Contractor starting work on the demolition or construction stage(s) of the contract.
- b. Processing Contractor's invoice(s) for construction activities/items of work.
- c. Review of any schedule updates.

Submittal of the Baseline Schedule, and subsequent schedule updates, is understood to be the Contractor's certification that the submitted schedule meets all of the requirements of the Contract Documents, represents the Contractor's plan on how the work will be accomplished, and accurately reflects the work that has been accomplished and how it was sequenced (as-built logic).

1.3 SCHEDULE FORMAT

1.3.1 Network Analysis Schedule (NAS)

Use the critical path method (CPM) to schedule and control project activities. Prepare and maintain project schedules using [Primavera P6][or][Microsoft Project 2010]. Importing data into the scheduling

program using data conversion techniques or third party software is cause for rejection of the submitted schedule. Build the schedule as follows:

- a. The Project Schedule must show submittals, Government review periods, material/equipment delivery, utility outages, all on-site construction, inspection, testing, and closeout activities. Government and Contractor on-site work activities must be driven by calendars that reflect Saturdays, Sundays and all Federal Holidays as non-work days.
- b. With the exception of the Contract Award and End Contract milestone activities, no activities shall be open-ended; each activity must have predecessor and successor ties. No activity must have open start or open finish (dangling) logic. Minimize redundant logic ties. Once an activity exists on the schedule it must not be deleted or renamed to change the scope of the activity and must not be removed from the schedule logic without approval from the Contracting Officer. While an activity cannot be deleted, where said activity is no longer applicable to the schedule but must remain within the logic stream for historical record, it can be changed to a milestone. Document any such change in the milestone's "Notebook", including a date and explanation for the change. The ID number for a deleted activity must not be re-used for another activity.
- c. Each activity must be assigned its appropriate Responsibility Code indicating responsibility to accomplish the work indicated by the activity, Phase Code and Work Location Code.
- d. Date/time constraint(s) and/or lags, other than those required by the contract, are not allowed unless accepted by the Contracting Officer. Include as the last activity in the contract schedule, a milestone activity named "Contract Completion Date".

1.3.1.1 Primavera P6 Settings and Parameters

Use the following Primavera P6 settings and parameters in preparing the Baseline Schedule. Deviation from these settings and parameters, without prior consent of the Contracting Officer, is cause for rejection of schedule submission.

- a. General: Define or establish Calendars and Activity Codes at the "Project" level, not the "Global" level.
- b. Admin Drop-Down Menu, Admin Preferences, Time Periods Tab:
 - (1) Set time periods for P6 to 8.0 Hours/Day, 40.0 Hours/Week, 172.0 Hours/Month and 2000.0 Hours/Year.
 - (2) Use assigned calendar to specify the number of work hours for each time period: Must be checked.
- c. Project Level, Dates Tab:
 - (1) Set "Must Finish By" date to "Contract Completion Date".
- d. Project Level, Defaults Tab:
 - (1) Duration Type: Set to "Fixed Duration & Units".

(2) Percent Complete Type: Set to "Physical".

(3) Activity Type: Set to "Task Dependent".

(4) Calendar: Set to "Standard 5 Day Workweek". Calendar must reflect Saturday, Sunday and all Federal holidays as non-work days. Alternative calendars may be used with Contracting Officer approval.

e. Project Level, Calculations Tab:

(1) Activity percent complete based on activity steps: Must be Checked.

(2) Reset Remaining Duration and Units to Original: Must be Checked.

(3) Subtract Actual from At Completion: Must be Checked.

(4) Recalculate Actual units and Cost when duration percent(%) complete changes: Must be Checked.

(5) Link Actual to Date and Actual This Period Units and Cost: Must be Checked.

f. Project Level, Settings Tab:

(1) Define Critical Activities: Check "Total Float is less than or equal to" and add "0d".

g. No on-site construction activity may have durations in excess of 20 working days.

1.3.1.2 Microsoft Project 2010 Settings and Parameters

The Network must have a minimum of 30 construction activities. No on-site construction activity may have durations in excess of 20 working days.

1.3.1.3 Cost Loading Microsoft Project 2010 Schedules

Assign material, labor and equipment costs to their respective Construction Activities. Material and equipment costs for which payment will be requested in advance of installation must be assigned to their respective procurement activity (i.e. the material/equipment on-site activity). Evenly disperse overhead and profit to each activity over the duration of the project. Cost loading must total to 100 percent of the value of the contract.

a. Submit an Earned Value Report with each schedule update showing activity budget, cost percent complete, earned amount and cost to complete as directed by the Contracting Officer.

b. With each schedule submission, provide a Schedule Variance control (SVC) diagram showing:

(1) Cash Flow S-Curves indicating planned project cost based on projected early and late activity finish dates.

(2) Earned Value to-date. Revise Cash Flow S-Curves when the contract

is modified, or as directed by the Contracting Officer.

1.3.2 Bar Chart Schedule

The Bar Chart must, as a minimum, show work activities, submittals, Government review periods, material/equipment delivery, utility outages, on-site construction, inspection, testing, and closeout activities. The Bar Chart must be time scaled and generated using an electronic spreadsheet program.

1.3.3 Schedule Submittals and Procedures

Submit [Network Analysis Schedules (NAS)][Bar Chart Schedules] and updates in hard copy and on electronic media that is acceptable to the Contracting Officer. Submit an electronic back-up of the project schedule in an import format compatible with the Government's scheduling program.

1.4 SCHEDULE MONTHLY UPDATES

Update the Construction Schedule at monthly intervals or when the schedule has been revised. The updated schedule must be kept current, reflecting actual activity progress and plan for completing the remaining work. Submit copies of purchase orders and confirmation of delivery dates as directed by the Contracting Officer.

a. Narrative Report: Provide with schedule updates. Identify and justify;

- (1) Progress made in each area of the project
- (2) Critical Path
- (3) Date/time constraint(s), other than those required by the contract
- (4) Changes in the following; added or deleted activities, original and remaining durations for activities that have not started, logic, milestones, planned sequence of operations, and critical path
- (5) Status of Contract Completion Date and interim milestones;
- (6) Current and anticipated delays (describe cause of delay and corrective actions(s) and mitigation measures to minimize);
- (7) Description of current and future schedule problem areas.

Each entry in the narrative report must cite the respective Activity ID and Activity Description, the date and reason for the change, and description of the change.

1.5 CONTRACT MODIFICATION

Submit a Time Impact Analysis (TIA) with each cost and time proposal for a proposed change. TIA must illustrate the influence of each change or delay on the Contract Completion Date or milestones. No time extensions will be granted nor delay damages paid unless a delay occurs which consumes all available Project Float, and extends the Projected Finish beyond the Contract Completion Date.

- a. Each TIA must be in both narrative and schedule form. The narrative must define the scope and conditions of the change; provide start and finish dates of impact, successor and predecessor activity to impact period, responsible party, describe how it originated, and how it impacts the schedule. The schedule submission must consist of three native files:
 - (1) Fragnet used to define the scope of the changed condition
 - (2) Most recent accepted schedule update as of the time of the proposal or claim submission that has been updated to show all activity progress as of the time of the impact start date.
 - (3) The impacted schedule that has the fragnet inserted in the updated schedule and the schedule "run" so that the new completion date is determined.
- b. For claimed as-built project delay, the inserted fragnet TIA method must be modified to account for as-built events known to occur after the data date of schedule update used.
- c. All TIAs must include any mitigation, and must determine the apportionment of the overall delay assignable to each individual delay. The associated narrative must clearly describe the findings in a chronological listing beginning with the earliest delay event.
 - (1) Identify types of delays as follows:
 - (a) Excusable Delay: Force-Majeure (e.g. weather) - Contractor may receive time extension, but time will not be compensable.
 - (b) Inexcusable Delay: Contractor Responsibility - Contractor will not receive time extension.
 - (c) Compensable Delay: Government Responsibility - Contractor may receive compensable time extension.
 - (2) If a combination of any of the delay types outlined above occurs, it is considered a Concurrent Delay, which will require an analysis of the facts to determine compensability and entitlement to any time extension under the applicable contract clauses.
- d. Submit Data disks containing the narrative and native schedule files.
- e. Unless the Contracting Officer requests otherwise, only add conformed contract modifications into the Project NAS.

1.6 3-WEEK LOOK AHEAD SCHEDULE

Prepare and issue a 3-Week Look Ahead schedule to provide a more detailed day-to-day plan of upcoming work identified on the Construction Schedule. Key the work plans to activity numbers when a NAS is required and update each week to show the planned work for the current and following two-week period. Additionally, include upcoming outages, closures, preparatory meetings, and initial meetings. Identify critical path activities on the Three-Week Look Ahead Schedule. The detail work plans are to be bar chart type schedules, maintained separately from the Construction Schedule on an

electronic spreadsheet program and printed on 8-1/2 by 11 inch sheets as directed by the Contracting Officer. Activities must not exceed 5 working days in duration and have sufficient level of detail to assign crews, tools and equipment required to complete the work. Deliver three hard copies and one electronic file of the 3-Week Look Ahead Schedule to the Contracting Officer no later than 8 a.m. each Monday, and review during the weekly CQC Coordination or Production Meeting.

1.7 CORRESPONDENCE AND TEST REPORTS:

All correspondence (e.g., letters, Requests for Information (RFIs), e-mails, meeting minute items, Production and QC Daily Reports, material delivery tickets, photographs) must reference Schedule Activities that are being addressed. All test reports (e.g., concrete, soil compaction, weld, pressure) must reference Schedule Activities that are being addressed.

1.8 ADDITIONAL SCHEDULING REQUIREMENTS

Any references to additional scheduling requirements, including systems to be inspected, tested and commissioned, that are located throughout the remainder of the Contract Documents, are subject to all requirements of

this section.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

SECTION 01 33 00

SUBMITTAL PROCEDURES

05/11

PART 1 GENERAL

1.1 SUMMARY

The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.

Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Contractor's to check and approve all items prior to submittal and stamp, sign, and date indicating action taken. Proposed deviations from the contract requirements are to be clearly identified. Include within submittals items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Submittals requiring Government approval are to be scheduled and made prior to the acquisition of the material or equipment covered thereby. Pick up and dispose of samples not incorporated into the work in accordance with manufacturer's Safety Data Sheets (SDS) and in compliance with existing laws and regulations.

A submittal register showing items of equipment and materials for when submittals are required by the specifications is provided as "Appendix A - Submittal Register".

1.2 DEFINITIONS

1.2.1 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by Submittal Description (SD) numbers and titles as follows:

SD-01 Preconstruction Submittals

Submittals which are required prior to or the start of the next major phase of the construction on a multi-phase contract, includes schedules, tabular list of data, or tabular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.

Certificates of insurance

Surety bonds

List of proposed Subcontractors

List of proposed products

Construction progress schedule

Network Analysis Schedule (NAS)

Submittal register

Schedule of prices or Earned Value Report

Health and safety plan

Work plan

Quality Control (QC) plan

Environmental protection plan

1.2.2 Approving Authority

Office or designated person authorized to approve submittal.

1.2.3 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, [except those SD-01 Pre-Construction Submittals noted above](#), construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor QC approval.][for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submittals with an "S" are for inclusion in the Sustainability eNotebook, in conformance to Section [01 33 29 SUSTAINABILITY REPORTING](#). Submit the following in accordance with this section.

[SD-01 Preconstruction Submittals](#)

[Submittal Register; G](#)

1.4 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.4.1 Designer of Record Approved (DA)

[Designer of Record \(DOR\) approval is required for extensions of design, critical materials, any deviations from the solicitation, the accepted](#)

proposal, or the completed design, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings." Contractor to provide the Government with the number of copies designated hereinafter of all DOR approved submittals. The Government may review any or all Designer of Record approved submittals for conformance to the Solicitation, Accepted Proposal and the completed design. The Government will review all submittals designated as deviating from the Solicitation or Accepted Proposal, as described below. Design submittals to be in accordance with Section 01 33 16.00 10 DESIGN DATA (DESIGN AFTER AWARD). Generally, design submittals should be identified as SD-05 Design Data submittals.

1.4.2 Government Approved (G)

Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings."

1.4.6 For Information Only

They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.4.7 Sustainability Reporting Submittals (S)

Submittals for Guiding Principle Validation (GPV) or Third Party Certification (TPC) are indicated with an "S" designation. Submit the information required by the technical sections that demonstrates compliance with the sustainable requirement, and for inclusion in the Sustainability eNotebook as required by Section 01 33 29 SUSTAINABILITY REPORTING. A full submittal for an item may be provided under another SD; however, for the "S" submittal, only provide that portion of the submittal that demonstrates compliance with the sustainable requirement. If the sustainable submittal does require Government Approval, it may be tagged under another SD with a "G."

Schedule submittals for these items throughout the course of construction as provided; do not wait until closeout.

1.5 PREPARATION

1.5.1 Transmittal Form

Use the attached sample transmittal form in Appendix B ENG Form 4025-R for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms [will be furnished to the Contractor][are included in the QCS software that the Contractor is required to use for this contract]. Properly complete this form by filling out all the heading blank spaces and identifying each item submitted. Exercise special care to ensure proper listing of the specification paragraph and sheet number of the contract drawings pertinent to the data submitted for each item.

1.5.2 Source Drawings for Shop Drawings

The entire set of Source Drawing files (DWG) will not be provided to the

Contractor. Only those requested by the Contractor to prepare shop drawings may be provided. Request the specific Drawing Number only for the preparation of Shop Drawings. These drawings may only be provided after award.

1.5.2.1 Terms and Conditions

Data contained on these electronic files must not be used for any purpose other than as a convenience in the preparation of construction data for the referenced project. Any other use or reuse shall be at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim and waives to the fullest extent permitted by law, any claim or cause of action of any nature against the Government, its agents or sub consultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from the use of these electronic files.

These electronic Source Drawing files are not construction documents. Differences may exist between the Source Drawing files and the corresponding construction documents. The Government makes no representation regarding the accuracy or completeness of the electronic Source Drawing files, nor does it make representation to the compatibility of these files with the Contractor hardware or software. In the event that a conflict arises between the signed and sealed construction documents prepared by the Government and the furnished Source Drawing files, the signed and sealed construction documents govern. The Contractor is responsible for determining if any conflict exists. Use of these Source Drawing files does not relieve the Contractor of duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic Source Drawing files for use in producing construction data related to this contract, remove all previous indicia of ownership (seals, logos, signatures, initials and dates).

1.5.3 Electronic File Format

Provide submittals in electronic format, with the exception of material samples required for SD-04 Samples items. [In addition to the electronic submittal, provide 1 hard copies of the submittals.] Compile the submittal file as a single, complete document, to include the Transmittal Form described within. Name the electronic submittal file specifically according to its contents, coordinate the file naming convention with the Contracting Officer. Electronic files must be of sufficient quality that all information is legible. Use PDF as the electronic format, unless otherwise specified or directed by the Contracting Officer. Generate PDF files from original documents with bookmarks so that the text included in the PDF file is both searchable and can be copied. If documents are scanned, Optical Character Resolution (OCR) routines are required. Index and bookmark files exceeding 30 pages to allow efficient navigation of the file. When required, the electronic file must include a valid electronic signature, or scan of a signature.

Email electronic submittal documents fewer than 10MB to an email address as directed by the Contracting Officer. Provide electronic documents over

10MB on an optical disc, or through an electronic file sharing system such as the AMRDEC SAFE Web Application located at the following website:
<https://safe.amrdec.army.mil/safe/>.

Provide hard copies of submittals when requested by the Contracting Officer. Up to (1) additional hard copies of any submittal may be requested at the discretion of the Contracting Officer, at no additional cost to the Government.

1.6 QUANTITY OF SUBMITTALS

1.6.1 Number of Samples SD-04 Samples

- a. Submit two samples, or two sets of samples showing range of variation, of each required item. One approved sample or set of samples will be retained by approving authority and one will be returned to Contractor.
- b. Submit one sample panel or provide one sample installation where directed. Include components listed in technical section or as directed.
- c. Submit one sample installation, where directed.
- d. Submit one sample of non-solid materials.

1.7 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

1.8 SUBMITTAL REGISTER

Prepare and maintain submittal register, as the work progresses. Do not change data which is output in columns (c), (d), (e), and (f) as delivered by Government; retain data which is output in columns (a), (g), (h), and (i) as approved. A submittal register showing items of equipment and materials for which submittals are required by the specifications is provided as an attachment. This list may not be all inclusive and additional submittals may be required. Maintain a submittal register for the project in accordance with Section 01 45 00.15 10 RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM). [The Government will provide the initial submittal register][in electronic format][with the following fields completed, to the extent that will be required by the Government during subsequent usage.]

Column (c): Lists specification section in which submittal is required.

Column (d): Lists each submittal description (SD No. and type, e.g. SD-02 Shop Drawings) required in each specification section.

Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.

[Thereafter, the Contractor is to track all submittals by maintaining a complete list, including completion of all data columns, including dates on which submittals are received and returned by the Government.

]

1.8.1 Use of Submittal Register

Submit submittal register.

1.8.2 Copies Delivered to the Government

Deliver one copy of submittal register updated by Contractor to Government with each invoice request.

1.9 VARIATIONS

Variations from contract requirements require both Designer of Record (DOR) and Government approval pursuant to contract Clause FAR 52.236-21 and will be considered where advantageous to Government.

1.9.1 Considering Variations

Discussion with Contracting Officer prior to submission, after consulting with the DOR, will help ensure functional and quality requirements are met and minimize rejections and re-submittals. When contemplating a variation which results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP).

Specifically point out variations from contract requirements in transmittal letters. Failure to point out deviations may result in the Government requiring rejection and removal of such work at no additional cost to the Government.

1.9.2 Proposing Variations

When proposing variation, deliver written request to the Contracting Officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government, including the DOR's written analysis and approval. If lower cost is a benefit, also include an estimate of the cost savings. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

Check the column "variation" of ENG Form 4025 for submittals which include proposed deviations requested by the Contractor. Set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.9.3 Warranting that Variations are Compatible

When delivering a variation for approval, Contractor, including its Designer(s) of Record, warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

1.9.4 Review Schedule Extension

In addition to normal submittal review period, a period of 10 working days will be allowed for consideration by the Government of submittals with variations.

1.10 SCHEDULING

Schedule and submit concurrently submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings at the same time. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 5 calendar days will be allowed and shown on the register for review and approval of submittals for substitutions.

- a. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential resubmittal of requirements.
- b. Submittals called for by the contract documents will be listed on the register. If a submittal is called for but does not pertain to the contract work, the Contractor is to include the submittal in the register and annotate it "N/A" with a brief explanation. Approval by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but which have been omitted from the register or marked "N/A."
- c. Re-submit register and annotate monthly by the Contractor with actual submission and approval dates. When all items on the register have been fully approved, no further re-submittal is required.
- d. Carefully control procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

1.11 GOVERNMENT APPROVING AUTHORITY

When approving authority is Contracting Officer, the Government will:

- a. Note date on which submittal was received.
- b. Review submittals for approval within scheduling period specified and only for conformance with project design concepts and compliance with contract documents.
- c. Identify returned submittals with one of the actions defined in paragraph REVIEW NOTATIONS and with markings appropriate for action indicated.

Upon completion of review of submittals requiring Government approval, stamp and date submittals. 1 copies of the submittal will be retained by the Contracting Officer and 1 copies of the submittal will be returned to the Contractor. If the Government performs a conformance review of other

Designer of Record approved submittals, the submittals will be so identified and returned, as described above.

1.11.1 Review Notations

Contracting Officer review will be completed within 10 calendar days after date of submission. Submittals will be returned to the Contractor with the following notations:

- a. Submittals marked "approved" or "accepted" authorize the Contractor to proceed with the work covered.
- b. Submittals marked "approved as noted" or "approved, except as noted, resubmittal not required," authorize the Contractor to proceed with the work covered provided he takes no exception to the corrections.
- c. Submittals marked "not approved" or "disapproved," or "revise and resubmit," indicate noncompliance with the contract requirements or design concept, or that submittal is incomplete. Resubmit with appropriate changes. No work shall proceed for this item until resubmittal is approved.
- d. Submittals marked "not reviewed" will indicate submittal has been previously reviewed and approved, is not required, does not have evidence of being reviewed and approved by Contractor, or is not complete. A submittal marked "not reviewed" will be returned with an explanation of the reason it is not reviewed. Resubmit submittals returned for lack of review by Contractor or for being incomplete, with appropriate action, coordination, or change.

1.12 DISAPPROVED[OR REJECTED] SUBMITTALS

Make corrections required by the Contracting Officer. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications; notice as required under the FAR clause entitled CHANGES, is to be given to the Contracting Officer. Contractor is responsible for the dimensions and design of connection details and construction of work. Failure to point out deviations may result in the Government requiring rejection and removal of such work at the Contractor's expense.

If changes are necessary to submittals, make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

1.13 APPROVED[/ACCEPTED] SUBMITTALS

The Contracting Officer's approval or acceptance of submittals is not to be construed as a complete check, and indicates only that

Approval or acceptance will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for.

After submittals have been approved or accepted by the Contracting Officer,

no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.14 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not be construed to change or modify any contract requirements. Before submitting samples, the Contractor to assure that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those which may be damaged in testing, will be returned to the Contractor, at his expense, upon completion of the contract. Samples not approved will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make of that material. Government reserves the right to disapprove any material or equipment which previously has proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer for testing. Samples failing to meet contract requirements will automatically void previous approvals. Contractor to replace such materials or equipment to meet contract requirements.

Approval of the Contractor's samples by the Contracting Officer does not relieve the Contractor of his responsibilities under the contract.

1.15 WITHHOLDING OF PAYMENT

1.16 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements is to be similar to the following:

CONTRACTOR	
(Firm Name)	
_____	Approved
_____	Approved with corrections as noted on submittal data and/or attached sheets(s)
SIGNATURE: _____	
TITLE: _____	
DATE: _____	

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

SECTION 08 51 13

ALUMINUM WINDOWS

05/11

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ALUMINUM ASSOCIATION (AA)

AA DAF45 (2003; Reaffirmed 2009) Designation System for Aluminum Finishes

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)

AAMA 1302.4 (1973) Specifications for Forced-Entry Resistant Aluminum Prime Windows

AAMA 1503 (2009) Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections

AAMA 2603 (2017a) Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels

AAMA 2604 (2017a) Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels

AAMA 2605 (2017a) Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels

AAMA 611 (2014) Voluntary Specification for Anodized Architectural Aluminum

AAMA 701/702 (2011) Voluntary Specification for Pile Weatherstripping and Replaceable Fenestration Weatherseals

AAMA 902 (2016) Voluntary Specification for Sash Balances

AAMA WSG.1 (1995) Window Selection Guide

AAMA/WDMA/CSA 101/I.S.2/A440 (2011; Update 1 2014) North American Fenestration Standard/Specification for

Windows, Doors, and Skylights

ASTM INTERNATIONAL (ASTM)

ASTM A276/A276M	(2017) Standard Specification for Stainless Steel Bars and Shapes
ASTM E1300	(2016) Standard Practice for Determining Load Resistance of Glass in Buildings
ASTM F1642/F1642M	(2017) Standard Test Method for Glazing and Glazing Systems Subject to Airblast Loadings
ASTM F2248	(2012) Standard Practice for Specifying an Equivalent 3-Second Duration Design Loading for Blast Resistant Glazing Fabricated with Laminated Glass

INTERNATIONAL WINDOW CLEANING ASSOCIATION (IWCA)

IWCA I-14.1	(2001) Window Cleaning Safety Standard
-------------	----------------------------------------

NATIONAL FENESTRATION RATING COUNCIL (NFRC)

NFRC 100	(2014) Procedure for Determining Fenestration Product U-Factors
NFRC 200	(2014) Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 101	(2018; TIA 18-1) Life Safety Code
----------	-----------------------------------

1.2 CERTIFICATION

Each prime window unit must bear the AAMA Label warranting that the product complies with [AAMA/WDMA/CSA 101/I.S.2/A440](#). Certified test reports attesting that the prime window units meet the requirements of [AAMA/WDMA/CSA 101/I.S.2/A440](#), including test size, will be acceptable in lieu of product labeling.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor Quality Control approval.][for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submittals with an "S" are for inclusion in the Sustainability eNotebook, in conformance to Section [01 33 29 SUSTAINABILITY REPORTING](#). Submit the following in accordance with Section [01 33 00 SUBMITTAL PROCEDURES](#):

[SD-02 Shop Drawings](#)

Windows; G[, [_____]]

Fabrication Drawings

SD-03 Product Data

Windows; G[, [_____]]

Hardware; G[, [_____]]

Fasteners; G[, [_____]]

Window Performance; G[, [_____]]

Screens; G[, [_____]]

Weatherstripping; G[, [_____]]

Accessories; G[, [_____]]

[G[, [_____]]

SD-04 Samples

Finish Sample

Window Sample

SD-05 Design Data

Structural Calculations for Deflection; G[, [_____]]

[Design Analysis; G[, [_____]]

Submit design analysis with calculations showing that the design of each different size and type of aluminum window unit and its anchorage to the structure meets the minimum antiterrorism standards required by paragraph "Minimum Antiterrorism Performance", unless conformance is demonstrated by Standard Airblast Test results. Calculations verifying the structural performance of each window proposed for use, under the given loads, must be prepared and signed by a registered Professional Engineer. The window components and anchorage devices to the structure, as determined by the design analysis, must be reflected in the shop drawings.]

SD-10 Operation and Maintenance Data

Windows, Data Package 1; G[, [_____]]

Submit in accordance with Section 01 78 23 OPERATION AND MAINTENANCE DATA.

Plastic Identification

When not labeled, identify types in Operation and Maintenance

1.4 QUALITY ASSURANCE

1.4.1 Shop Drawing Requirements

Provide drawings that indicate elevations of windows, full-size sections, thickness and gages of metal, fastenings, proposed method of anchoring, size and spacing of anchors, details of construction, method of glazing, details of operating hardware, [mullion details,] [method and materials for weatherstripping,] [method of attaching screens,] [material and method of attaching subframes,] [stools,] [casings,] [sills,] [trim,] [window cleaner anchors,] installation details, and other related items.

1.4.2 Sample Requirements

1.4.2.1 Finish Sample Requirements

Submit color chart of standard factory color coatings when factory-finish color coating is to be provided.

1.4.3 Design Data Requirements

Submit calculations to substantiate compliance with deflection requirements[and Minimum Antiterrorism Performance criteria]. A registered Professional Engineer must provide calculations.

Submit [design analysis](#) with calculations showing that the design of each different size and type of aluminum window unit and its anchorage to the structure meets the requirements of paragraph "Minimum Antiterrorism Performance Criteria". Calculations verifying the structural performance of each window proposed for use, under the given loads, must be prepared and signed by a registered professional engineer. Reflect the window components and anchorage devices to the structure, as determined by the design analysis, in the shop drawings.

1.4.4 Test Report Requirements

Submit test reports for each type of window attesting that identical windows have been tested and meet the requirements specified herein for conformance to [AAMA/WDMA/CSA 101/I.S.2/A440](#) including test size, [and [minimum condensation resistance factor](#) (CRF) [, and [resistance to forced entry](#)][, and, for Minimum Antiterrorism windows, in lieu of a Design Analysis, results of a Standard Airblast Test].

1.5 DELIVERY AND STORAGE

Deliver windows to project site in an undamaged condition. Use care in handling and hoisting windows during transportation and at the jobsite. Store windows and components out of contact with the ground, under a weathertight covering, so as to prevent bending, warping, or otherwise damaging the windows. Repair damaged windows to an "as new" condition as approved. If windows can not be repaired, provide a new unit.

1.6 PROTECTION

Protect finished surfaces during shipping and handling using the manufacturer's standard method. Do not apply coatings or lacquers to

surfaces to which caulking and glazing compounds must adhere.

1.7 PLASTIC IDENTIFICATION

Label plastic products provided to indicate their polymeric composition according to the following list. Where products are not labeled, provide product data indicating polymeric information in Operation and Maintenance Manual.

- a. Type 1: Polyethylene Terephthalate (PET, PETE).
- b. Type 2: High Density Polyethylene (HDPE).
- c. Type 3: Vinyl (Polyvinyl Chloride or PVC).
- d. Type 4: Low Density Polyethylene (LDPE).
- e. Type 5: Polypropylene (PP).
- f. Type 6: Polystyrene (PS).
- g. Type 7: Other. Use of this code indicates that the package in question is made with a resin other than the six listed above, or is made of more than one resin listed above, and used in a multi-layer combination.

1.8 FIELD MEASUREMENTS

Take field measurements prior to preparation of the drawings and fabrication.

1.9 PERFORMANCE REQUIREMENTS

1.9.1 Wind Loading Design Pressure

Design window components, including mullions, hardware, and anchors, to withstand a wind-loading design pressure of at least **pounds per square foot (psf)**.

1.9.2 [Tests

Test windows proposed for use in accordance with **AAMA/WDMA/CSA 101/I.S.2/A440** for the particular type and quality window specified.

Perform tests by a nationally recognized independent testing laboratory equipped and capable of performing the required tests. Submit the results of the tests as certified laboratory reports required herein.

Minimum design load for a uniform-load structural test must be **50 psf**.

[Test projected windows in accordance with the applicable portions of the **AAMA WSG.1** for air infiltration, water resistance, uniform-load deflection, and uniform-load structural test.]

[Test double-hung windows in accordance with the applicable portions of the **AAMA WSG.1** for air infiltration, water resistance, uniform-load deflection, and uniform-load structural test.]]

1.10 DRAWINGS

Submit the [Fabrication Drawings](#) for aluminum window units showing complete window assembly including hardware, weatherstripping, and subframe assembly details.

1.11 WINDOW PERFORMANCE

Aluminum windows must meet the following performance requirements. Perform testing requirements by an independent testing laboratory or agency.

1.11.1 Structural Performance

Structural test pressures on window units must be for positive load (inward) and negative load (outward). After testing, there will be no glass breakage, permanent damage to fasteners, hardware parts, support arms or actuating mechanisms or any other damage which could cause window to be inoperable. There must be no permanent deformation of any main frame, sash or ventilator member in excess of the requirements established by [AAMA/WDMA/CSA 101/I.S.2/A440](#) for the window types and classification specified in this section.

NOTE: Fixed windows and general window repairs shall match existing style and specifications.

1.11.2 Air Infiltration

Air infiltration must not exceed the amount established by [AAMA/WDMA/CSA 101/I.S.2/A440](#) for each window type.

1.11.3 Water Penetration

Water penetration must not exceed the amount established by [AAMA/WDMA/CSA 101/I.S.2/A440](#) for each window type.

1.11.4 [Life Safety Criteria

Provide windows that conform to [NFPA 101](#) Life Safety Code when rescue and/or second means of escape are indicated.

1.11.5 Sound Attenuation

The window unit must have a minimum STC of [\[\[41\] \[_____\]](#) with the window glazed with two pieces of [1/4 inch](#) thick laminated glass [\[\[34\] \[_____\]](#) with the window glazed with [1/2 inch](#) air space between two pieces of [1/4 inch](#) thick glass] when tested in accordance with [AAMA/WDMA/CSA 101/I.S.2/A440](#) acoustical performance (optional).

1.12 QUALIFICATION

Window manufacturer must specialize in designing and manufacturing the type of aluminum windows specified in this section, and have a minimum of [5](#) years of documented successful experience. Manufacturer must have the facilities capable of meeting contract requirements, single-source responsibility and warranty.

1.13 WARRANTY

Provide Manufacturer's standard performance guarantees or warranties that extend beyond a 1 year period.

PART 2 PRODUCTS

2.1 PRODUCT SUSTAINABILITY CRITERIA

For products in this section, where applicable and to extent allowed by performance criteria, provide and document the following:

2.1.1 Recycled content of Aluminum Windows

Provide aluminum window frames meeting the recycled content requirements as stated within this section and provide documentation in accordance with Section 01 33 29 SUSTAINABILITY REPORTING paragraph RECYCLED CONTENT.

2.1.2 Energy Efficient Equipment for Residential Windows

Provide Energy Star residential windows in accordance with Section 01 33 29 SUSTAINABILITY REPORTING paragraph ENERGY EFFICIENT EQUIPMENT.

2.2 WINDOWS

Provide prime windows that comply with AAMA/WDMA/CSA 101/I.S.2/A440 and the requirements specified herein. In addition to compliance with AAMA/WDMA/CSA 101/I.S.2/A440, window framing members for each individual light of glass must not deflect to the extent that deflection perpendicular to the glass light exceeds L/175 of the glass edge length when subjected to uniform loads at specified design pressures. Provide Structural calculations for deflection to substantiate compliance with deflection requirements. Provide windows of types, performance classes, performance grades, combinations, and sizes indicated or specified. [Provide aluminum window frames with a minimum recycled content of [20 percent.] Design windows to accommodate hardware, glass, weatherstripping, screens, and accessories to be furnished. Each window must be a complete factory assembled unit with or without glass installed. Dimensions shown are minimum. Provide windows with insulating glass and thermal break necessary to achieve a minimum Condensation Resistance Factor (CRF) of [_____] when tested in accordance with AAMA 1503.

2.2.1 Horizontal Sliding Windows (HS)

Type HS-[R15] [LC25] [CW30] [AW40] [[R] [LC] [CW] [AW]- [_____] (Optional Performance Grade)].

2.2.2 Fixed Windows (F)

Type F-[R15] [LC25] [CW30] [AW40] [[R] [LC] [CW] [AW]- [_____] (Optional Performance Grade)].

2.2.3 Forced Entry Resistant Windows

In addition to meeting the requirements of AAMA/WDMA/CSA 101/I.S.2/A440, windows designated for resistance to forced entry must conform to the requirements of AAMA 1302.4.

2.2.4 Glass and Glazing

Materials are specified in Section 08 81 00 GLAZING.

2.2.5 Caulking and Sealing

Are specified in Section 07 92 00 JOINT SEALANTS.

2.2.6 Weatherstripping

AAMA/WDMA/CSA 101/I.S.2/A440.

2.2.7 Sash Poles

Seamless aluminum tube, 0.0625 inch minimum wall thickness, one inch diameter, [] feet long, with cast aluminum hook and protective cover or tip on the lower end. Finish must match windows.

2.3 FABRICATION

Fabrication of window units must comply with AAMA/WDMA/CSA 101/I.S.2/A440.

2.3.1 Provisions for Glazing

Design windows and rabbets suitable for glass thickness shown [or specified]. [For minimum antiterrorism windows, attach glazing to its supporting frame using structural silicone sealant or adhesive glazing tape in accordance with ASTM F2248.]

2.3.2 Weatherstripping

Provide for ventilating sections of all windows to ensure a weather-tight seal meeting the infiltration requirements specified in AAMA/WDMA/CSA 101/I.S.2/A440. Provide easily replaceable factory-applied weatherstripping. Use molded vinyl, molded or molded-expanded neoprene or molded or expanded Ethylene Propylene Diene Terpolymer (EPDM) compression-type weatherstripping for compression contact surfaces. Use treated woven pile or wool, or polypropylene or nylon pile bonded to nylon fabric and metal or plastic backing strip weatherstripping for sliding surfaces. Do not use neoprene or polyvinylchloride weatherstripping where exposed to direct sunlight.

2.3.3 Fasteners

Use window manufacturer's standard for windows, trim, and accessories. Self-tapping sheet-metal screws are not acceptable for material more than 1/16 inch thick.

2.3.4 Adhesives

Provide joint sealants as specified in Section 07 92 00 JOINT SEALANTS. For interior application of joint sealants, comply with applicable regulations regarding reduced VOC's, and as specified in Section 07 92 00 JOINT SEALANTS.

2.3.5 Drips and Weep Holes

Provide continuous drips over heads of top ventilators. Where fixed windows adjoin ventilators, drips must be continuous across tops of fixed

windows. Provide drips and weep holes as required to return water to the outside.

2.3.6 Combination Windows

Windows used in combination must be factory assembled of the same class and grade. Where factory assembly of individual windows into larger units is limited by transportation considerations, prefabricate, match mark, transport, and field assemble.

2.3.7 Mullions and Transom Bars

[Provide mullions between multiple window units to resist two times (2X) glazing resistance in accordance with [ASTM F2248](#) and [ASTM E1300](#).]Provide mullions with a thermal break. Secure mullions and transom bars to adjoining construction and window units in such a manner as to permit expansion and contraction and to form a weathertight joint.[Where window cleaner anchors are required, reinforce mullions and anchor to adjoining construction so as to provide safe and adequate support.] Provide mullion covers on the interior and exterior to completely close exposed joints and recesses between window units and to present a neat appearance.[Provide special covers over structural support at mullions as indicated.]

2.3.8 Accessories

Provide windows complete with necessary hardware, fastenings, clips, fins, anchors, glazing beads, and other appurtenances necessary for complete installation and proper operation.

2.3.8.1 Hardware

[AAMA/WDMA/CSA 101/I.S.2/A440](#). The item, type, and functional characteristics must be the manufacturer's standard for the particular window type. Provide hardware of suitable design and of sufficient strength to perform the function for which it is used. Equip all operating ventilators with a lock or latching device which can be secured from the inside.

2.3.8.2 Fasteners

Provide concealed anchors of the type recommended by the window manufacturer for the specific type of construction. Anchors and fasteners must be compatible with the window and the adjoining construction. Provide a minimum of three anchors for each jamb located approximately [6 inches](#) from each end and at midpoint.

2.3.8.3 Window-Cleaner Anchors

Provide double head anchors for windows[indicated][specified]. Anchors must be stainless steel of size and design required for the window type and application, conforming to [ASTM A276/A276M](#). Provide two anchors for each single window[and each adjacent fixed glass window unit]. Fasten anchors [44 inches](#) above the window sill utilizing appropriate methods for the window type and application in accordance with industry safety standards.

2.3.8.4 Window Anchors

Anchoring devices for installing windows must be made of aluminum, cadmium-plated steel, stainless steel, or zinc-plated steel conforming to AAMA/WDMA/CSA 101/I.S.2/A440.

2.3.9 Finishes

Exposed aluminum surfaces must be factory finished with an[anodic coating][or][organic coating].[Color must be match existng and[as indicated in the plans].] All windows[for each building] must have the same finish.

2.3.9.1 Anodic Coating

Clean exposed aluminum surfaces and provide an anodized finish conforming to AA DAF45 and AAMA 611. Finish must be:

- [a. Architectural Class II (0.4 mil to 0.7 mil), designation AA-M10-C22-[A31, clear (natural)] [A32, integral color] [A34, electrolytically deposited color] anodized.]
- [b. Architectural Class I (0.7 mil or thicker), designation AA-M10-C22-[A41, clear (natural)] [A42, integral color] [A44, electrolytically deposited color] anodized.]

2.3.9.2 Organic Coating

Clean and prime exposed aluminum surfaces. Provide a[baked enamel finish in accordance with AAMA 2603 with total dry film thickness not less than 0.8 mil][high-performance finish in accordance with [AAMA 2604][AAMA 2605] with total dry film thickness of not less than 1.2 mils].

2.3.10 Screens

AAMA/WDMA/CSA 101/I.S.2/A440. Provide one insect screen for each operable exterior sash or ventilator. Design screens to be rewirable, easily removable from inside the building, and to permit easy access to operating hardware.

2.4 SPECIAL OPERATORS

For windows having operating hardware or locking or latching devices located more than 6 feet above the floor, provide suitably designed operators or locking or latching devices necessary for convenient and proper window operation.

2.4.1 Pole Operators

Poles must be of proper length to permit window operation from 5 feet above the floor. Provide one pole operator for each room, and one pole hanger for each pole. Locate hangers where directed.

2.4.2 Extension Crank Operators

Provide removable handles for crank-operated rotary-type operators located more than 6 feet above the floor. Provide one removable handle for each room.

2.4.3 Mechanical Operators

Provide [manual] operators for group operation of continuous rows of windows. Operators must be capable of opening and closing windows without appreciable deflection, vibration or rattle. Provide means of adjustment for transmission lines. Provide operators to control window units in groups as recommended by the window manufacturer or as indicated.

2.5 THERMAL-BARRIER WINDOWS

Provide thermal-barrier windows, complete with accessories and fittings, where indicated.

Specify material and construction except as follows:

- a. Aluminum alloy must be 6063-T6.
- b. Frame construction, including operable sash, must be factory-assembled and factory-sealed inner and outer aluminum completely separated from metal-to-metal contact. Join assembly by a continuous, concealed, low conductance divider housed in an interlocking extrusion of the inner frame. Metal fasteners, straps, or anchors must not bridge the connection between the inner and outer frame.
- c. Operating hardware for each sash must consist of spring-loaded nylon cushion blocks and pin locks designed to lock in predetermined locations.
- d. Sash must be completely separated from metal-to-metal contact by means of woven-pile weatherstripping, plastic, or elastomeric separation members.
- e. Operating and storm sash must be factory-glazed with the type of glass indicated and of the quality specified in Section 08 81 00 GLAZING.

2.6 MULLIONS

Provide mullions between multiple-window units where indicated.

Provide profiles for mullions and mullion covers, reinforced as required for the specified wind loading, and securely anchored to the adjoining construction. Mullion extrusion will include serrations or pockets to receive weatherstripping, sealant, or tape at the point of contact with each window flange.

Mullion assembly must include aluminum window clamps or brackets screwed or bolted to the mullion and the mullion cover.

Mullion cover must be screw-fastened to the mullion unless otherwise indicated.

Mullion reinforcing members must be fabricated of the materials specified in AAMA/WDMA/CSA 101/I.S.2/A440 and meet the specified design loading.

2.7 WINDOW CLEANERS' BOLTS

Provide window cleaners' bolts for all windows 7 feet or higher above

finished grade, except for windows that can be removed and cleaned from the ground or from a lower roof level without the use of an extension ladder. Provide two bolts for each single window unit and each fixed glass unit. Locate bolts 44 inches above the window sill.

Window cleaners' bolts must be double-head type, AISI Series 300 corrosion-resistant steel, size and design complying with IWCA I-14.1. Contact side of the bolts must be ground to fit flat against window jambs. Bolts must be factory- or field-attached before windows are set. Reinforce backs of frames to receive bolts with 1/4 by 6-inch corrosion-resistant steel or aluminum plates bolted or welded to the frames at the factory. Special wall anchors must be provided on frames at the point of bolt attachment.

PART 3 EXECUTION

3.2 INSTALLATION

3.2.1 Method of Installation

Install in accordance with the window manufacturer's printed instructions and details. Build in windows as the work progresses or install without forcing into prepared window openings. Set windows at proper elevation, location, and reveal; plumb, square, level, and in alignment; and brace, strut, and stay properly to prevent distortion and misalignment. Protect ventilators and operating parts against accumulation of dirt and building materials by keeping ventilators tightly closed and locked to frame. Bed screws or bolts in sill members, joints at mullions, contacts of windows with sills, built-in fins, and subframes in mastic sealant of a type recommended by the window manufacturer. Install and caulk windows in a manner that will prevent entrance of water and wind. Fasten insect screens securely in place.

Any materials that show visual evidence of biological growth due to the presence of moisture must not be installed on the building project.

3.2.2 Dissimilar Materials

Where aluminum surfaces are in contact with, or fastened to masonry, concrete, wood, or dissimilar metals, except stainless steel or zinc, protect the aluminum surface from dissimilar materials as recommended in the Appendix to AAMA/WDMA/CSA 101/I.S.2/A440. Do not coat surfaces in contact with sealants after installation with any type of protective material.

3.2.3 Anchors and Fastenings

Make provision for securing units to each other, to masonry, and to other adjoining construction. Windows installed in masonry walls must have head and jamb members designed to recess into masonry wall not less than 7/16 inch.

3.2.4 Adjustments After Installation

After installation of windows and completion of glazing and field painting, adjust all ventilators and hardware to operate smoothly and to provide weathertight sealing when ventilators are closed and locked. Lubricate

hardware and operating parts as necessary.[Adjust double hung windows to operate with maximum applied force of 25 pounds in either direction, not including breakaway friction force.] Verify that products are properly installed, connected, and adjusted.

3.3 CLEANING

Clean interior and exterior surfaces of window units of mortar, plaster, paint spattering spots, and other foreign matter to present a neat appearance, to prevent fouling of weathering surfaces and weather-stripping, and to prevent interference with the operation of hardware. Replace all stained, discolored, or abraded windows that cannot be restored to their original condition with new windows.

-- End of Section --

SECTION 08 71 00

DOOR HARDWARE

02/16

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM E283 (2004; R 2012) Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen

ASTM F883 (2013) Padlocks

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)

ANSI/BHMA A156.1 (2016) Butts and Hinges

ANSI/BHMA A156.10 (2017) Power Operated Pedestrian Doors

ANSI/BHMA A156.12 (2013) Interconnected Locks & Latches

ANSI/BHMA A156.13 (2017) Mortise Locks & Latches Series 1000

ANSI/BHMA A156.14 (2013) Sliding and Folding Door Hardware

ANSI/BHMA A156.15 (2015) Release Devices Closer Holder, Electromagnetic and Electromechanical

ANSI/BHMA A156.16 (2013) Auxiliary Hardware

ANSI/BHMA A156.17 (2014) Self Closing Hinges & Pivots

ANSI/BHMA A156.18 (2016) Materials and Finishes

ANSI/BHMA A156.19 (2013) Power Assist & Low Energy Power Operated Doors

ANSI/BHMA A156.2 (2017) Bored and Preassembled Locks and Latches

ANSI/BHMA A156.21 (2014) Thresholds

ANSI/BHMA A156.22 (2017) Door Gasketing and Edge Seal Systems

ANSI/BHMA A156.23 (2010) Electromagnetic Locks

ANSI/BHMA A156.24	(2012) Delayed Egress Locking Systems
ANSI/BHMA A156.25	(2013) Electrified Locking Devices
ANSI/BHMA A156.26	(2012) Continuous Hinges
ANSI/BHMA A156.27	(2011) Power and Manual Operated Revolving Pedestrian Doors
ANSI/BHMA A156.29	(2012) Exit Locks, Exit Alarms, Alarms for Exit Devices
ANSI/BHMA A156.3	(2014) Exit Devices
ANSI/BHMA A156.30	(2014) High Security Cylinders
ANSI/BHMA A156.31	(2013) Electric Strikes and Frame Mounted Actuators
ANSI/BHMA A156.36	(2010) Auxiliary Locks
ANSI/BHMA A156.4	(2013) Door Controls - Closers
ANSI/BHMA A156.5	(2014) Cylinder and Input Devices for Locks
ANSI/BHMA A156.6	(2015) Architectural Door Trim
ANSI/BHMA A156.7	(2016) Template Hinge Dimensions
ANSI/BHMA A156.8	(2015) Door Controls - Overhead Stops and Holders

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 101	(2018; TIA 18-1) Life Safety Code
NFPA 252	(2017) Standard Methods of Fire Tests of Door Assemblies
NFPA 70	(2017; ERTA 1-2 2017; TIA 17-1; TIA 17-2; TIA 17-3; TIA 17-4; TIA 17-5; TIA 17-6; TIA 17-7; TIA 17-8; TIA 17-9; TIA 17-10; TIA 17-11; TIA 17-12; TIA 17-13; TIA 17-14) National Electrical Code
NFPA 72	(2016) National Fire Alarm and Signaling Code
NFPA 80	(2016; TIA 16-1) Standard for Fire Doors and Other Opening Protectives

STEEL DOOR INSTITUTE (SDI/DOOR)

SDI/DOOR A250.8	(2003; R2008) Recommended Specifications for Standard Steel Doors and Frames
-----------------	------------------------------------------------------------------------------

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

36 CFR 1191

Americans with Disabilities Act (ADA)
Accessibility Guidelines for Buildings and
Facilities; Architectural Barriers Act
(ABA) Accessibility Guidelines

UNDERWRITERS LABORATORIES (UL)

UL 14C

(2006; Reprint Jul 2017) UL Standard for
Safety Swinging Hardware for Standard
Tin-Clad Fire Doors Mounted Singly and in
Pairs

UL Bld Mat Dir

(updated continuously online) Building
Materials Directory

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor Quality Control approval.][for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submittals with an "S" are for inclusion in the Sustainability eNotebook, in conformance with Section 01 33 29 SUSTAINABILITY REPORTING. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Manufacturer's Detail Drawings; G[, [_____]]

Verification of Existing Conditions; G[, [_____]]

Hardware Schedule; G[, [_____]]

Keying System; G[, [_____]]

SD-03 Product Data

Hardware Items; G[, [_____]]

SD-08 Manufacturer's Instructions

Installation

SD-10 Operation and Maintenance Data

Hardware Schedule Items, Data Package 1; G[, [_____]]

SD-11 Closeout Submittals

Key Bitting

1.3 SHOP DRAWINGS

Submit manufacturer's detail drawings indicating all hardware assembly

components and interface with adjacent construction.[Indicate power components and wiring coordination for electrified hardware.] Base shop drawings on verified field measurements and include [verification of existing conditions](#).

1.4 PRODUCT DATA

Indicate fire-ratings at applicable components. Provide documentation of ABA/ADA accessibility compliance of applicable components, as required by [36 CFR 1191](#) Appendix D - Technical.

1.5 [HARDWARE SCHEDULE](#)

Prepare and submit hardware schedule in the following form:

Hardware Item	Quantity	Size	Reference Publication Type No.	Finish	Mfr Name and Catalog No.	Key Control Symbols	UL Mark (If fire-rated and listed)	BHMA Finish Designation

1.6 KEY BITTING CHART REQUIREMENTS

1.6.1 Requirements

Submit [key bitting](#) charts to the Contracting Officer prior to completion of the work. Include:

- Complete listing of all keys (e.g. AA1 and AA2).
- Complete listing of all key cuts (AA1-123456, AA2-123458).
- Tabulation showing which key fits which door.
- Copy of floor plan showing doors and door numbers.

1.7 QUALITY ASSURANCE

1.7.1 Hardware Manufacturers and Modifications

Provide, as far as feasible, locks, hinges, [pivots,] and closers of one lock, hinge, [pivot,] or closer manufacturer's make. Modify hardware as necessary to provide features indicated or specified.

1.7.2 Key Shop Drawings Coordination Meeting

Prior to the submission of the key shop drawing, the Contracting Officer, Contractor, Door Hardware Subcontractor, using Activity and Base Locksmith must meet to discuss and coordinate key requirements for the facility.

1.8 DELIVERY, STORAGE, AND HANDLING

Deliver hardware in original individual containers, complete with necessary appurtenances including fasteners and instructions. Mark each individual container with item number as shown on hardware schedule. [Deliver permanent keys [and removable cores] to the Contracting Officer, either directly or by certified mail. Deliver construction master keys with the locks.]

PART 2 PRODUCTS

2.1 TEMPLATE HARDWARE

Hardware applied to metal [or to prefinished] doors must be manufactured using a template. Provide templates to door and frame manufacturers in accordance with ANSI/BHMA A156.7 for template hinges. Coordinate hardware items to prevent interference with other hardware.

2.2 HARDWARE FOR FIRE DOORS AND EXIT DOORS

Provide all hardware necessary to meet the requirements of NFPA 72 for door alarms, NFPA 80 for fire doors, NFPA 101 for exit doors, NFPA 252 for fire tests of door assemblies, ABA/ADA accessibility requirements, and all other requirements indicated, even if such hardware is not specifically mentioned in paragraph HARDWARE SCHEDULE. [Provide swinging hardware for tin-clad fire doors in accordance with UL 14C.] Provide Underwriters Laboratories, Inc. labels for such hardware in accordance with UL Bld Mat Dir or equivalent labels in accordance with another testing laboratory approved in writing by the Contracting Officer.

2.3 HARDWARE ITEMS

Clearly and permanently mark with the manufacturer's name or trademark, hinges, pivots, locks, latches, exit devices, bolts and closers where the identifying mark is visible after the item is installed. For closers with covers, the name or trademark may be beneath the cover. Coordinate electrified door hardware components with corresponding components specified in Division 28 ELECTRONIC SECURITY SYSTEMS (ESS).

2.3.1 Hinges

Provide in accordance with ANSI/BHMA A156.1. Provide hinges that are 4-1/2 by 4-1/2 inch unless otherwise indicated. Construct loose pin hinges for interior doors and reverse-bevel exterior doors so that pins are non-removable when door is closed. Other anti-friction bearing hinges may be provided in lieu of ball bearing hinges.

2.3.1.1 Protection Devices

Provide full height hand and finger protection device at the hinge-side area opening of doors and gates. Provide hinge-side protection devices on both sides of doors and gates, covering hinges and space between door and frame when doors are in the open position. The installed device must push hand and fingers out of the opening and away from a crushing hazard.

2.3.2 Continuous Hinges

Where continuous hinges are required, provide in accordance with ANSI/BHMA A156.26.

2.3.3 Pivots

Provide in accordance with ANSI/BHMA A156.17.

2.3.4 Spring Hinges

Provide in accordance with ANSI/BHMA A156.17.

2.3.5 Locks and Latches

2.3.5.1 Mortise Locks and Latches

Provide in accordance with ANSI/BHMA A156.13, Series 1000, Operational Grade 1, Security Grade 2. [Provide factory installed lead lining in locks for lead shielded doors.] [Provide mortise locks with escutcheons not less than 7 by 2-1/4 inch with a bushing at least 1/4 inch long. Cut escutcheons to fit cylinders and provide trim items with straight, beveled, or smoothly rounded sides, corners, and edges.] Provide knobs and roses of mortise locks with screwless shanks and no exposed screws.

2.3.5.2 Bored Locks and Latches

Provide in accordance with ANSI/BHMA A156.2, Series 4000, Grade 1. [Provide factory installed lead lining in locks for lead -shielded doors.]

2.3.5.3 Residential Bored Locks and Latches

Provide in accordance with ANSI/BHMA A156.2, Series 4000, Grade 2. Install locks for exterior doors with threaded roses or concealed machine screws.

2.3.5.4 Interconnected Locks and Latches

Provide in accordance with ANSI/BHMA A156.12. Provide F96 or F97, unless otherwise specified.

2.3.5.5 Hospital Latches

Push-pull latch set similar and equal to Glynn-Johnson HL6, 1/2 inch throw, [2-3/4 inch] [5 inch] backset, to fit 161 cutout. Cover approximately 2-1/2 by 5-1/2 inch, handle approximately 1-1/2 by 4-1/2 inch, projection approximately 2-1/2 inch, covers and handles of stainless steel, BHMA 630 finish, engraved "PUSH" and "PULL" on handles, push handle pointing up, pull handle pointing down.

2.3.5.6 Auxiliary Locks

Provide in accordance with ANSI/BHMA A156.36, Grade 1.

2.3.5.7 Combination Locks

[Key pharmacy door locks separately from building master key system.] Heavy-duty, mechanical combination lockset with five push buttons, standard sized knobs, 3/4 inch deadlocking latch, 2-3/4 inch backset. Locks to operate by pressing two or more of the buttons in unison or

individually in the proper sequence. Inside knob operates the latch. Provide a keyed cylinder on the interior to permit setting the combination. [Provide a keyed [removable core] cylinder on the exterior to permit bypassing the combination.] [Provide a thumb turn on the interior to activate passage set function so that outside knob operates latch without using the combination.]

2.3.6 Exit Devices

Provide in accordance with ANSI/BHMA A156.3, Grade 1. Provide adjustable strikes for rim type and vertical rod devices. Provide open back strikes for pairs of doors with mortise and vertical rod devices. Provide [touch bars in lieu of conventional crossbars and arms.] [Provide escutcheons not less than 7 by 2-1/4 inch.]

2.3.7 Exit Locks With Alarm

Provide in accordance with ANSI/BHMA A156.3 and ANSI/BHMA A156.29, Type E0431 (with full width horizontal actuating bar) for single doors; Type E0431 (with actuating bar) or E0471 (with actuating bar and top and bottom bolts, both leaves active) for pairs of doors, unless otherwise specified. [Provide terminals for connection to remote indicating panel.] [Provide outside control key.] Provide door alarms integrated with the fire alarm system in accordance with NFPA 72.

2.3.8 Cylinders and Cores

[Provide cylinders and cores for new locks, including locks provided under other sections of this specification.] Provide cylinders and cores with [six pin tumblers. Provide cylinders from the products of one manufacturer, and provide cores from the products of one manufacturer. [Rim cylinders, mortise cylinders, and knobs of bored locksets have interchangeable cores which are removable by special control keys. Stamp each interchangeable core with a key control symbol in a concealed place on the core.]

2.3.8.1 High Security Cylinders

Provide in accordance with ANSI/BHMA A156.30, security level [A][B][C] for all high security cylinder components.

2.3.9 Push Button Mechanisms

Provide in accordance with ANSI/BHMA A156.5, Grade 1.

2.3.10 Electrified Hardware

Comply with the requirements of NFPA 70 for wiring of electrified hardware.

2.3.10.1 Electric Strikes and Frame Mounted Actuators

Provide in accordance with ANSI/BHMA A156.31, Grade 1. Provide electric strikes and actuators as required to meet operational requirements. Provide electric strikes that [release automatically] [remain secure] [remain maintained] during power failure. [Provide a separate power supply for electric strikes, other locking devices and ancillary parts.] [Provide battery backup for continued operation during power failure.] Provide

strikes and actuators with a minimum opening force of 2300 pounds.

Provide facility interface devices that use direct current (dc) power to energize the solenoids. Provide electric strikes and actuators that incorporate end-of-line resistors to facilitate line supervision by the system. If not incorporated into the electric strike or local controller, provide metal oxide resistors (MOVs) to protect the controller from reverse current surges.

2.3.10.1.1 Solenoid

Provide actuating solenoid for strikes and actuators that are rated for continuous duty, cannot dissipate more than 12 Watts and must operate on 12 or 24 Volts dc. Inrush current cannot exceed 1 ampere and the holding current cannot be greater than 500 milliamperes. Actuating solenoid must move from fully secure to fully open positions in less than 500 milliseconds.

2.3.10.1.2 Signal Switches

Provide strikes and actuators with signal switches to indicate to the system when the bolt is not engaged or the strike mechanism is unlocked. Signal switches must report a forced entry to the system.

2.3.10.1.3 Tamper Resistance

[Provide strike guards that prevent tampering with the latch bolt of the locking hardware or the latch bolt keeper of the electric strike. Strike guards to bolt through the door using tamper resistant screws. Provide strike guards made of 1/8 inch thick brass and that are 11-1/14 inch high by 1-5/8 inch wide, with a minimum 5/32 inch wide offset.

2.3.10.1.4 Coordination

Provide electric strikes and actuators of a size, weight and profile compatible with each specified door frame. Field verify installation clearances prior to procurement.

2.3.10.1.5 Mounting Method

Provide electric strikes and actuators suitable for use with single and double doors, with mortise or rim type hardware specified, and for right or left hand mounting as specified. In double door installations, locate the lock in the active leaf and monitor the fixed leaf.

2.3.10.2 Electrified Mortise Locks

Provide in accordance with ANSI/BHMA A156.25, Grade 1. Provide electrified mortise locks that [release automatically] [remain secure] [remain maintained] during power failure. Provide facility interface devices that use dc power to energize solenoids. Provide solenoids, resistors, and signal switches in accordance with paragraph ELECTRIC STRIKES AND FRAME MOUNTED ACTUATORS.

2.3.10.2.1 Power Transfer Hinges

Provide power transfer hinges with each electrified lock that route power

and monitoring signals from the lockset to the door frame. Coordinate power transfer hinges with door frames.

2.3.10.3 Card Readers and Keypad Access Control Hardware

Provide in accordance with ANSI/BHMA A156.5 and ANSI/BHMA A156.25, Grade 1 components. Provide devices that are tamper alarmed, tamper and vandal resistant, solid state, and do not contain electronics which could compromise the access control subsystem should the subsystem be attacked. Provide surface, semi-flush, pedestal, or weatherproof mountable devices as specified for each individual location. [Each device to contain a visual display, either mounted on the face, or on an integral part of the device, to indicate access or exit request processing, request approval, and request denial.] Provide [proximity] [insertion] [swipe through] type card readers capable of reading [magnetic stripe] [high coercivity magnetic stripe] [Wiegand] [Hollerith] [proximity] [Transmissive Infrared] [Keypad] [_____] /Keypad [Smart Card] [Biometric] [_____] type access control cards. Provide keypads that contain an integral 12-digit tactile keyboard with digits [arranged in numerical order]. Provide keypads that are [a standalone device] [or] [integrated into the card reader]. Coordinate access control hardware with corresponding devices and systems specified in Division 28 ELECTRONIC SECURITY SYSTEMS (ESS).

2.3.10.4 Power Operated Pedestrian Door Hardware

Provide in accordance with ANSI/BHMA A156.10, Grade 1.

2.3.10.5 Release Devices

In accordance with ANSI/BHMA A156.15, Grade 1.

2.3.10.5.1 Closer Holders

Provide [floor] [door] [header] mounted closer holder devices connected by [separate releasing] [integral releasing] to [fire] [smoke] detecting devices.

2.3.10.5.2 Release Devices

Provide [door] mounted [Electromagnetic] [electromechanical] [free swinging] release devices connected to [fire] [smoke] detecting devices.

2.3.10.6 Power Assist and Low Energy Power Operated Doors

Provide in accordance with ANSI/BHMA A156.19, Grade 1.

2.3.10.7 Electromagnetic Locks

Provide in accordance with ANSI/BHMA A156.23, Grade 1. Provide electromagnetic locks that do not contain any moving parts and depend solely upon electromagnetism to secure a portal by generating at least 1200 pounds of holding force. The lock must interface with the local processors without external, internal or functional alteration of the local processor. The electromagnetic lock must incorporate an end of line resistor to facilitate line supervision by the system. Provide metal-oxide resistors (MOVs) to protect controllers from reverse current surges, if not incorporated into the electromagnetic lock or local controller.

2.3.10.7.1 Armature

Provide electromagnetic locks with internal circuitry to eliminate residual magnetism and inductive kickback. Provide actuating armature that operates on 12 or 24 Volts dc and cannot dissipate more than 12 Watts. Holding current must be less than 500 milliamperes. Actuating armature must take less than 300 milliseconds to change the status of the lock from fully secure to fully open or fully open to fully secure.

2.3.10.7.2 Tamper Resistance

Provide lock mechanism encased in hardened guard barriers to deter forced entry.

2.3.10.7.3 Mounting Method

Provide electromagnetic lock suitable for use with single and double door with mortise or rim type hardware and compatible with right or left hand mounting.

2.3.10.8 Delayed Egress Locking System

Provide in accordance with [ANSI/BHMA A156.24](#), Grade 1.

2.3.10.9 Power and Manual Operated Revolving Pedestrian Doors

Provide in accordance with [ANSI/BHMA A156.27](#), Grade 1.

2.3.11 Keying System

Provide a an extension of the existing keying system. Existing locks were manufactured by [_____] and [do not] have interchangeable cores.][Provide[a construction master keying system][construction interchangeable cores].][Provide key cabinet as specified.]

2.3.12 Lock Trim

Provide cast, forged, or heavy wrought construction and commercial plain design for lock trim.

2.3.12.1 Knobs and Roses

Provide in accordance with [ANSI/BHMA A156.2](#) and [ANSI/BHMA A156.13](#) for knobs, roses, and escutcheons. For unreinforced knobs, roses, and escutcheons, provide a 0.050 inch thickness. For reinforced knobs, roses, and escutcheons, provide an outer shell thickness of 0.035 inch and a combined total thickness of 0.070 inch, except at knob shanks. Provide knob shanks 0.060 inch thick.

2.3.12.2 Lever Handles

Provide lever handles [where indicated in the Hardware Schedule]. Provide in accordance with [ANSI/BHMA A156.3](#) for mortise locks of lever handles for exit devices. Provide lever handle locks with a breakaway feature (such as a weakened spindle or a shear key) to prevent irreparable damage to the lock when force in excess of that specified in [ANSI/BHMA A156.13](#) is applied to the lever handle. Provide lever handles return to within 1/2 inch of

the door face.

2.3.12.3 Texture

Provide knurled or abrasive coated knobs or lever handles for doors which are accessible to blind persons and which lead to dangerous areas.

2.3.13 Keys

[Provide] one file key, one duplicate key, and one working key for each key change keying system]. [Provide] one additional working key for each lock of each keyed-alike group. [[Furnish] two additional keys for each sleeping room.] [[Furnish][Provide] [[_____] great grand master keys,] [[_____] construction master keys,] [and [_____] control keys for removable cores].] [[Furnish][Provide] a quantity of key blanks equal to 20 percent of the total number of file keys.] Stamp each key with appropriate key control symbol and "U.S. property - do not duplicate." Do not place room number on keys.

[[Furnish][Provide] seven change keys for each interchangeable core, [furnish][provide] two control keys, six masters keys, and six construction master keys. [[Furnish][Provide] a quantity of key blanks equal to 20 percent of the total number of change keys.] Stamp each key with appropriate key control symbol and "U.S. property - do not duplicate." Do not place room numbers on keys.

2.3.14 Door Bolts

Provide in accordance with ANSI/BHMA A156.16. Provide dustproof strikes for bottom bolts, except at doors having metal thresholds. Provide automatic latching flush bolts in accordance with ANSI/BHMA A156.3, Type 25.

2.3.15 Closers

Provide in accordance with ANSI/BHMA A156.4, Series C02000, Grade 1, with PT 4C. Provide with brackets, arms, mounting devices, fasteners, [full size covers, except at storefront mounting,] [pivots,] [cement cases,] and other features necessary for the particular application. Size closers in accordance with manufacturer's printed recommendations, or provide multi-size closers, Sizes 1 through 6, and list sizes in the Hardware Schedule. Provide manufacturer's 10 year warranty.

2.3.15.1 Identification Marking

Engrave each closer with manufacturer's name or trademark, date of manufacture, and manufacturer's size designation in locations that will be visible after installation.

2.3.16 Overhead Holders

Provide in accordance with ANSI/BHMA A156.8.

2.3.17 Door Protection Plates

Provide in accordance with ANSI/BHMA A156.6.

2.3.17.1 Sizes of [Armor] [Mop] [and] Kick Plates

2 inch less than door width for single doors; 1 inch less than door width for pairs of doors. Provide [8] [10] inch kick plates for flush doors] [and] [1 inch less than height of bottom rail for panel doors]. Provide a minimum [36] inch armor plates for flush doors [and] completely cover lower panels of panel doors, except 16 inch high armor plates on fire doors. Provide [4] [6] inch mop plates.

2.3.17.2 Edge Guards

Stainless steel, of same height as armor plates. Apply to [hinge stile] [lock stile] [meeting stiles].

2.3.18 Door Stops and Silencers

Provide in accordance with ANSI/BHMA A156.16. Silencers Type L03011. Provide three silencers for each single door, two for each pair.

2.3.19 Padlocks

Provide in accordance with ASTM F883.

2.3.20 Thresholds

Provide in accordance with ANSI/BHMA A156.21. Use J35100, with vinyl or silicone rubber insert in face of stop, for exterior doors opening out, unless specified otherwise.

2.3.21 Weatherstripping Gasketing

Provide in accordance with ANSI/BHMA A156.22. Provide the type and function designation where specified in paragraph HARDWARE SCHEDULE. Provide a set to include head and jamb seals[, sweep strips,] [and, for pairs of doors, astragals]. Air leakage of weatherstripped doors not to exceed [0.5] [1.25] cubic feet per minute of air per square foot of door area when tested in accordance with ASTM E283. Provide weatherstripping with one of the following:

2.3.21.1 Extruded Aluminum Retainers

Extruded aluminum retainers not less than 0.050 inch wall thickness with vinyl, neoprene, silicone rubber, or polyurethane inserts. Provide [clear (natural)] [bronze] anodized aluminum.

2.3.21.2 Interlocking Type

Zinc or bronze not less than 0.018 inch thick.

2.3.21.3 Spring Tension Type

Spring bronze or stainless steel not less than 0.008 inch thick.

2.3.22 [Lightproofing] [and] [Soundproofing] Gasketing

Provide in accordance with ANSI/BHMA A156.22. Provide adjustable doorstops at heads, jams and automatic door bottoms in accordance with the hardware set, of extruded aluminum, [clear (natural)] [bronze] anodized, surface applied, with vinyl fin seals between plunger and housing. Provide

doorstops with solid neoprene tube, silicone rubber, or closed cell sponge gasket. Provide door bottoms with adjustable operating rod and silicone rubber or closed cell sponge neoprene gasket. Provide doorstops that are mitered at corners. Provide type and function designation where specified in paragraph HARDWARE SETS.

2.3.23 Rain Drips

Provide in accordance with ANSI/BHMA A156.22. Provide extruded aluminum rain drips, not less than 0.08 inch thick, [clear anodized] [bronze anodized] [factory painted] [factory primed] finish. Provide the manufacturer's full range of color choices to the Contracting Officer for color selection [Provide rain drips with a 4 inch overlap on each side of each exterior door that is not protected by an awning, roof, eave or other horizontal projection.] Set drips in sealant and fasten with stainless steel screws.

2.3.23.1 Door Rain Drips

Approximately 1-1/2 inch high by 5/8 inch projection. Align bottom with bottom edge of door.

2.3.23.2 Overhead Rain Drips

Approximately 1-1/2 inch high by 2-1/2 inch projection. Align bottom with door frame rabbet.

2.3.24 Auxiliary Hardware (Other than locks)

Provide in accordance with ANSI/BHMA A156.16, Grade 1.

2.3.25 Sliding and Folding Door Hardware

Provide in accordance with ANSI/BHMA A156.14, Grade 1. Finishes to match other hardware specified herein.

2.3.26 Special Tools

Provide special tools, such as spanner and socket wrenches and dogging keys, as required to service and adjust hardware items.

2.4 FASTENERS

Provide fasteners of type, quality, size, and quantity appropriate to the specific application. Fastener finish to match hardware. Provide stainless steel or nonferrous metal fasteners in locations exposed to weather. Verify metals in contact with one another are compatible and will avoid galvanic corrosion when exposed to weather.

2.5 FINISHES

[Provide in accordance with ANSI/BHMA A156.18. Provide hardware in BHMA 630 finish (satin stainless steel), unless specified otherwise. Provide items not manufactured in stainless steel in BHMA 626 finish (satin chromium plated) over brass or bronze, except [aluminum paint] [prime coat] finish for surface door closers, and except [BHMA 652 finish (satin chromium plated)] [BHMA 600 finish (primed for painting)] for steel hinges. Provide

hinges for exterior doors in stainless steel with BHMA 630 finish or chromium plated brass or bronze with BHMA 626 finish. Furnish exit devices in BHMA 626 finish in lieu of BHMA 630 finish [except where BHMA 630 is specified under paragraph HARDWARE SETS]. Match exposed parts of concealed closers to lock and door trim. Match hardware finish for aluminum doors to the doors.

] [Provide in accordance with ANSI/BHMA A156.18. Provide hardware in BHMA 612 finish (satin bronze), unless specified otherwise. Finish surface door closers [bronze paint] [prime coat] finish. Provide steel hinges in [BHMA 639 finish (satin bronze plated)] [BHMA 600 finish (primed for painting)]. Provide exposed parts of concealed closers finish to match lock and door trim. Match hardware finish for aluminum doors to match the doors. Provide hardware showing on interior of [bathrooms] [shower rooms] [toilet rooms] [washrooms] [laundry rooms] [and kitchens] in BHMA 629 finish (bright stainless steel) or BHMA 625 finish (bright chromium plated).

2.6 KEY CABINET AND CONTROL SYSTEM

Provide in accordance with ANSI/BHMA A156.5, [Type [E8331 (25 hooks)] [E8341 (125 hooks)] [E8351 (150 hooks)] [E8311 (600 hooks)] [E8321 (700 hooks)].] [Type required to yield a capacity (number of hooks) 50 percent greater than the number of key changes used for door locks.]

PART 3 EXECUTION

3.1 INSTALLATION

Provide hardware in accordance with manufacturers' printed installation instructions. Fasten hardware to wood surfaces with full-threaded wood screws or sheet metal screws. Provide machine screws set in expansion shields for fastening hardware to solid concrete and masonry surfaces. Provide toggle bolts where required for fastening to hollow core construction. Provide through bolts where necessary for satisfactory installation.

3.1.1 Weatherstripping Installation

Provide full contact, weathertight seals that allow operation of doors without binding the weatherstripping.

3.1.1.1 Stop Applied Weatherstripping

Fasten in place with color matched sheet metal screws not more than 9 inch on center after doors and frames have been finish painted.

3.1.1.2 Interlocking Type Weatherstripping

Provide interlocking, self adjusting type on heads and jambs and flexible hook type at sills. Nail weatherstripping to door 1 inch on center and to heads and jambs at 4 inch on center.

3.1.1.3 Spring Tension Type Weatherstripping

Provide spring tension type on heads and jambs. Provide bronze nails with bronze. Provide stainless steel nails with stainless steel. Space nails not more than 1-1/2 inch on center.

3.1.2 [Lightproofing] [and] [Soundproofing] Installation

Provide as specified for stop applied weatherstripping.

3.1.3 Threshold Installation

Extend thresholds the full width of the opening and notch end for jamb stops. Set thresholds in a full bed of sealant and anchor to floor with cadmium-plated, countersunk, steel screws [in expansion sleeves].

3.2 FIRE DOORS AND EXIT DOORS

Provide hardware in accordance with NFPA 72 for door alarms, NFPA 80 for fire doors, NFPA 101 for exit doors, and NFPA 252 for fire tests of door assemblies. [Provide tin-clad fire doors in accordance with UL 14C].

3.3 HARDWARE LOCATIONS

Provide in accordance with SDI/DOOR A250.8, unless indicated or specified otherwise.

- a. Kick and Armor Plates: Push side of single-acting doors. Both sides of double-acting doors.
- b. Mop Plates: Bottom flush with bottom of door.

3.4 KEY CABINET AND CONTROL SYSTEM

Locate where [directed] [indicated]. Tag one set of file keys and one set of duplicate keys. Place other keys in appropriately marked envelopes, or tag each key. Provide complete instructions for setup and use of key control system. On tags and envelopes, indicate door and room numbers or master or grand master key.

3.5 FIELD QUALITY CONTROL

After installation, protect hardware from paint, stains, blemishes, and other damage until acceptance of work. Submit notice of testing 15 days before scheduled, so that testing can be witnessed by the Contracting Officer. Adjust hinges, locks, latches, bolts, holders, closers, and other items to operate properly. Demonstrate that permanent keys operate respective locks, and give keys to the Contracting Officer. Correct, repair, and finish, errors in cutting and fitting and damage to adjoining work.

3.6 HARDWARE SETS

Provide [hardware for aluminum doors under this section. Deliver Hardware templates and hardware, except field applied hardware, to the aluminum door and frame manufacturer for use in fabricating doors and frames.]

-- End of Section --

SECTION 09 51 00

ACOUSTICAL CEILINGS

08/17

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM A1008/A1008M	(2016) Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable
ASTM A167	(2011) Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
ASTM A489	(2012) Standard Specification for Carbon Steel Lifting Eyes
ASTM A580/A580M	(2016) Standard Specification for Stainless Steel Wire
ASTM A641/A641M	(2009a; R 2014) Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire
ASTM A653/A653M	(2017) Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
ASTM B633	(2015) Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel
ASTM C423	(2009a) Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
ASTM C635/C635M	(2017) Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings
ASTM C636/C636M	(2013) Standard Practice for Installation of Metal Ceiling Suspension Systems for

	Acoustical Tile and Lay-In Panels
ASTM C834	(2017) Standard Specification for Latex Sealants
ASTM E119	(2016a) Standard Test Methods for Fire Tests of Building Construction and Materials
ASTM E1264	(2014) Acoustical Ceiling Products
ASTM E1414/E1414M	(2011a; E 2014) Airborne Sound Attenuation Between Rooms Sharing a Common Ceiling Plenum
ASTM E1477	(1998a; R 2017) Standard Test Method for Luminous Reflectance Factor of Acoustical Materials by Use of Integrating-Sphere Reflectometers
ASTM E580/E580M	(2017) Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions
ASTM E795	(2016) Standard Practices for Mounting Test Specimens During Sound Absorption Tests
ASTM E84	(2017) Standard Test Method for Surface Burning Characteristics of Building Materials

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH)

CDPH SECTION 01350	(2010; Version 1.1) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers
--------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------

GREEN SEAL (GS)

GS-36	(2013) Adhesives for Commercial Use
-------	-------------------------------------

SCIENTIFIC CERTIFICATION SYSTEMS (SCS)

SCS	SCS Global Services (SCS) Indoor Advantage
-----	--------------------------------------------

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

SCAQMD Rule 1168	(2017) Adhesive and Sealant Applications
------------------	------------------------------------------

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 3-310-04	(2013; with Change 1) Seismic Design for Buildings
--------------	----------------------------------------------------

UNDERWRITERS LABORATORIES (UL)

UL 2818

(2013) GREENGUARD Certification Program
For Chemical Emissions For Building
Materials, Finishes And Furnishings

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for [Contractor Quality Control approval.] [information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submit the following in accordance with Section 01 33 00
SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Approved Detail Drawings; G[, [____]]

SD-03 Product Data

Acoustical Ceiling Systems; G[, [____]]

SD-06 Test Reports

Fire Resistive Ceilings; G[, [____]]

Ceiling Attenuation Class and Test; G[, [____]]

SD-07 Certificates

Indoor Air Quality

1.3 DELIVERY, STORAGE. AND HANDLING

Deliver materials to the site in the manufacturer's original unopened containers with brand name and type clearly marked. Carefully handle and store materials in dry, watertight enclosures. Immediately before installation, store acoustical units for not less than 24 hours at the same temperature and relative humidity as the space where they will be installed in order to assure proper temperature and moisture acclimation.

1.4 ENVIRONMENTAL REQUIREMENTS

Maintain a uniform temperature of not less than 60 degrees F nor more than 85 degrees F and a relative humidity of not more than 70 percent for 24 hours before, during, and 24 hours after installation of acoustical units.

1.5 SCHEDULING

Complete and dry interior finish work such as plastering, concrete and terrazzo work before ceiling installation. Complete mechanical, electrical, and other work above the ceiling line; install and start operating heating, ventilating, and air conditioning systems in order to maintain temperature and humidity requirements.

1.6 WARRANTY

Provide manufacturer's standard performance guarantees or warranties that extend beyond a one year period. Include an agreement to repair or replace acoustical panels that fail within the warranty period in the standard performance guarantee or warranty. Failures include, but are not limited to, sagging and warping of panels; rusting and manufacturers defects of grid system.

1.7 EXTRA MATERIALS

Furnish spare tiles, from the same lot as those installed, of each color at the rate of [5] tiles for each 1000 tiles installed.

1.8 OTHER SUBMITTAL REQUIREMENTS

Submit the following:

- a. Manufacturer's catalog showing UL classification of fire-rated ceilings giving materials, construction details, types of floor and roof constructions to be protected, and UL design number and fire protection time rating for each required floor or roof construction and acoustic ceiling assembly.
- b. Reports by an independent testing laboratory attesting that acoustical ceiling systems meet specified [fire endurance] [and] [sound transmission] requirements. Data attesting to conformance of the proposed system to Underwriters Laboratories requirements for the fire endurance rating listed in UL Fire Resistance may be submitted in lieu of test reports.

PART 2 PRODUCTS

2.1 SYSTEM DESCRIPTION

Provide sound controlling units mechanically mounted on a ceiling suspension system for acoustical treatment. The unit size, texture, finish, and color must be as specified. The Contractor has the option to substitute inch-pound (I-P) Recessed Light Fixtures (RLF) for metric RLF. If the Contractor opts to furnish I-P RLF, other ceiling elements like acoustical ceiling tiles, air diffusers, air registers and grills, must also be I-P products. Coordinate the whole ceiling system with other details, like the location of access panels and ceiling penetrations, etc., shown on the drawings. The Contractor is responsible for all associated labor and materials and for the final assembly and performance of the specified work and products if I-P products are used. The location and extent of acoustical treatment must be as shown on the [approved detail drawings](#). Submit drawings showing suspension system, method of anchoring and fastening, details, and reflected ceiling plan. Coordinate with paragraph RECLAMATION PROCEDURES for reclamation of mineral fiber acoustical ceiling panels to be removed from the job site.

2.1.1 Ceiling Sound Absorption

Determine the Noise Reduction Coefficient (NRC) in accordance with ASTM C423 Test Method.

2.1.2 Light Reflectance

Determine light reflectance factor in accordance with [ASTM E1477](#) Test Method.

2.2 ACOUSTICAL UNITS

Submit two samples of each type of acoustical unit and each type of suspension grid tee section showing texture, finish, and color. Conform acoustical units to [ASTM E1264](#), Class A, and the following requirements:

2.2.2 Humidity Resistant Composition Units

2.2.2.1 Type

Non-asbestos mineral or glass fibers bonded with ceramic, moisture resistant thermo-setting resin, or other moisture resistant material and having a factory applied white paint finish. Provide panels that do not sag or warp under conditions of heat, high humidity or chemical fumes.

Provide certification of [indoor air quality for Humidity Resistant Ceiling Tiles](#).

2.2.2.2 Flame Spread

Class: A, 25 or less

2.2.2.3 Pattern

[_____]

2.2.2.4 Minimum NRC

Minimum [0.50] [_____] when tested on Mounting Type E-400 of [ASTM E795](#).

2.2.2.5 Minimum Light Reflectance Coefficient

LR-1, 0.75 or greater

2.2.2.6 Nominal Size

[24 by 48] [_____] inch

2.2.2.7 Edge Detail

Square

2.2.3 Unit Acoustical Absorbers

Absorbers must be individually mounted sound absorbing plaques composed of glass fibers or non-asbestos mineral fibers and having a NRC range of not less than 0.60 - 0.70 when tested in accordance with [ASTM C423](#) and reported as a 4 frequency average.

2.3 SUSPENSION SYSTEM

Provide standard [and](#) [as shown on drawings] suspension system conforming to [ASTM C635/C635M](#) [for intermediate-duty systems] [for heavy-duty

systems]. Provide surfaces exposed to view of [aluminum or steel with a factory-applied [white] baked-enamel finish]. Provide wall molding having a flange of not less than [15/16 inch]. Provide [inside and outside corner caps] [[standard] [overlapped] [mitered] corners]. Suspended ceiling framing system must have the capability to support the finished ceiling, light fixtures, air diffusers, and accessories, as shown. Provide a suspension system with a maximum deflection of 1/360 of the span length. Conform seismic details to the [guidance in [UFC 3-310-04](#) and [ASTM E580/E580M](#)].

Provide Suspension System containing a minimum of 15 percent recycled content. Provide data identifying percentage of [recycled content for suspension systems](#).

2.4 HANGERS

Provide hangers and attachment capable of supporting a minimum [300 pound](#) ultimate vertical load without failure of supporting material or attachment.

2.4.1 Wires

Conform wires to [[ASTM A641/A641M](#), Class 1, [[0.08 inch \(12 gauge\)](#)] inch] in diameter.] [[ASTM A580/A580M](#), composition 302 or 304, condition annealed stainless steel, [[0.08 inch \(12 gauge\)](#)] [[[_____](#)] inch] in diameter.]

2.4.2 Straps

Provide straps of [1 by 3/16 inch](#) galvanized steel conforming to [ASTM A653/A653M](#), with a light commercial zinc coating or [ASTM A1008/A1008M](#) with an electrodeposited zinc coating conforming to [ASTM B633](#), Type RS.

2.4.3 Rods

Provide [3/16 inch](#) diameter threaded steel rods, zinc or cadmium coated.

2.4.4 Eyebolts

Provide eyebolts of weldless, forged-carbon-steel, with a straight-shank in accordance with [ASTM A489](#). Eyebolt size must be a minimum [[_____](#)] [[1/4](#)] inch, [zinc coated][cadmium plated].

2.4.5 Masonry Anchorage Devices

Comply with [[ASTM C636/C636M](#)] [[_____](#)] for anchorage devices for [eyebolts] [machine screws] [wood screws].

2.5 ACCESS PANELS

Provide access panels that match adjacent acoustical units, designed and equipped with suitable framing and fastenings for removal and replacement without damage. Size panel to be not less than [12 by 12 inch](#) or more than [12 by 24 inch](#).

- a. Attach an identification plate of [0.032 inch](#) thick aluminum, [3/4 inch](#) in diameter, stamped with the letters "AP" and finished the same as the unit, near one corner on the face of each access panel.
- b. Identify ceiling access panel by a number utilizing white

identification plates or plastic buttons with contrasting numerals. Provide plates or buttons of minimum 1 inch diameter and securely attached to one corner of each access unit. Provide a typewritten card framed under glass listing the code identification numbers and corresponding system descriptions listed above. Mount the framed card where directed and furnish a duplicate card to the Contracting Officer. Code identification system is as follows:

- 1 Fire detection/alarm system
- 2 Air conditioning controls
- 3 Plumbing system
- 4 Heating and steam systems
- 5 Air conditioning duct system
- 6 Sprinkler system
- 7 Intercommunication system
- 8 Nurse's call system
- 9 Pneumatic tube system
- 10 Medical piping system
- 11 Program entertainment
- 12 Telephone junction boxes
- 13 Detector X-ray
- 14 [_____]

2.6 ADHESIVE

Use adhesive as recommended by tile manufacturer. [Provide non-aerosol adhesive products used on the interior of the building (defined as inside of the weatherproofing system) that meet either emissions requirements of [CDPH SECTION 01350](#) (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of [SCAQMD Rule 1168](#). Provide aerosol adhesives used on the interior of the building that meet either emissions requirements of [CDPH SECTION 01350](#) (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of [GS-36](#). For products located on the interior of the building (inside of the weatherproofing system), provide certification or validation of [indoor air quality for adhesives](#).]

2.7 FINISHES

Use manufacturer's standard textures, patterns and finishes as specified for acoustical units and suspension system members. Treat ceiling suspension system components to inhibit corrosion.

2.8 ACOUSTICAL SEALANT

Conform acoustical sealant to [ASTM C834](#), nonstaining. [Provide sealants used on the interior of the building (defined as inside of the weatherproofing system) that meet either emissions requirements of [CDPH SECTION 01350](#) (limit requirements for either office or classroom spaces regardless of space type) or VOC content requirements of [SCAQMD Rule 1168](#). For products located on the interior of the building (inside of the weatherproofing system), provide certification of [indoor air quality for Sealants](#).]

PART 3 EXECUTION

3.1 INSTALLATION

Do not install building construction materials that show visual evidence of biological growth.

Examine surfaces to receive directly attached acoustical units for unevenness, irregularities, and dampness that would affect quality and execution of the work. Rid areas, where acoustical units will be cemented, of oils, form residue, or other materials that reduce bonding capabilities of the adhesive. Complete and dry interior finish work such as plastering, concrete, and terrazzo work before installation. Complete and approve mechanical, electrical, and other work above the ceiling line prior to the start of acoustical ceiling installation. Provide acoustical work complete with necessary fastenings, clips, and other accessories required for a complete installation. Do not expose mechanical fastenings in the finished work. Lay out hangers for each individual room or space. Provide hangers to support framing around beams, ducts, columns, grilles, and other penetrations through ceilings. Keep main runners and carrying channels clear of abutting walls and partitions. Provide at least two main runners for each ceiling span. Wherever required to bypass an object with the hanger wires, install a subsuspension system so that all hanger wires will be plumb.

3.1.1 Suspension System

Install suspension system in accordance with [ASTM C636/C636M](#) and as specified herein. Do not suspend hanger wires or other loads from underside of steel decking.

3.1.1.1 Plumb Hangers

Install hangers plumb and not pressing against insulation covering ducts and pipes. Where lighting fixtures are supported from the suspended ceiling system, provide hangers at a minimum of four hangers per fixture and located not more than [6 inch](#) from each corner of each fixture.

3.1.1.2 Splayed Hangers

Where hangers must be splayed (sloped or slanted) around obstructions, offset the resulting horizontal force by bracing, countersplaying, or other acceptable means.

3.1.2 Wall Molding

Provide wall molding where ceilings abut vertical surfaces. Miter corners where wall moldings intersect or install corner caps. Secure wall molding

not more than 3 inch from ends of each length and not more than 16 inch on centers between end fastenings. Provide wall molding springs at each acoustical unit in semi-exposed or concealed systems.

3.1.3 Acoustical Units

Install acoustical units in accordance with the approved installation instructions of the manufacturer. Ensure that edges of acoustical units are in close contact with metal supports, with each other, and in true alignment. Arrange acoustical units so that units less than one-half width are minimized. Hold units in exposed-grid system in place with manufacturer's standard hold-down clips, if units weigh less than 1 psf or if required for fire resistance rating.

3.1.4 Caulking

Seal all joints around pipes, ducts or electrical outlets penetrating the ceiling. Apply a continuous ribbon of acoustical sealant on vertical web of wall or edge moldings.

3.1.5 Adhesive Application

Wipe back of tile to remove accumulated dust. Daub acoustical units on back side with four equal daubs of adhesive. Apply daubs near corners of tiles. Ensure that contact area of each daub is at least 2 inch diameter in final position. Press units into place, aligning joints and abutting units tight and uniform without differences in joint widths.

3.2 CEILING ACCESS PANELS

Locate ceiling access panels directly under the items which require access.

3.3 CLEANING

Following installation, clean dirty or discolored surfaces of acoustical units and leave them free from defects. Remove units that are damaged or improperly installed and provide new units as directed.

3.4 RECLAMATION PROCEDURES

Neatly stack ceiling tile, designated for recycling by the Contracting Officer, on 4 by 4 foot pallets not higher than 4 foot. Panels must be completely dry. Shrink wrap and symmetrically stack pallets on top of each other without falling over.

-- End of Section --

SECTION 09 90 00

PAINTS AND COATINGS
05/11

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)

ACGIH 0100 (2015; Suppl 2002-2016) Documentation of the Threshold Limit Values and Biological Exposure Indices

ASME INTERNATIONAL (ASME)

ASME A13.1 (2015) Scheme for the Identification of Piping Systems

ASTM INTERNATIONAL (ASTM)

ASTM C920 (2014a) Standard Specification for Elastomeric Joint Sealants

ASTM D235 (2002; R 2012) Mineral Spirits (Petroleum Spirits) (Hydrocarbon Dry Cleaning Solvent)

ASTM D2824/D2824M (2013) Aluminum-Pigmented Asphalt Roof Coatings, Non-Fibered, Asbestos Fibered, and Fibered without Asbestos

ASTM D4214 (2007; R 2015) Standard Test Method for Evaluating the Degree of Chalking of Exterior Paint Films

ASTM D4263 (1983; R 2012) Indicating Moisture in Concrete by the Plastic Sheet Method

ASTM D4444 (2013) Use and Calibration of Hand-Held Moisture Meters

ASTM D523 (2014) Standard Test Method for Specular Gloss

ASTM D6386 (2016) Standard Practice for Preparation of Zinc (Hot-Dip Galvanized) Coated Iron and Steel Product and Hardware Surfaces for Painting

ASTM E2129 (2010) Standard Practice for Data Collection for Sustainability Assessment

of Building Products

ASTM F1869

(2016) Standard Test Method for Measuring
Moisture Vapor Emission Rate of Concrete
Subfloor Using Anhydrous Calcium Chloride

MASTER PAINTERS INSTITUTE (MPI)

MPI 1	(2012) Aluminum Paint
MPI 10	(2012) Latex, Exterior Flat (MPI Gloss Level 1)
MPI 101	(2012) Primer, Epoxy, Anti-Corrosive, for Metal
MPI 107	(2012) Primer, Rust-Inhibitive, Water Based
MPI 108	(2012) Epoxy, High Build, Low Gloss
MPI 11	(2012) Latex, Exterior Semi-Gloss, MPI Gloss Level 5
MPI 113	(2012) Elastomeric, Pigmented, Exterior, Water Based, Flat
MPI 116	(2012) Block Filler, Epoxy
MPI 119	(2012) Latex, Exterior, Gloss (MPI Gloss Level 6)
MPI 13	(2012) Stain, Exterior Solvent-Based, Semi-Transparent
MPI 134	(2012) Primer, Galvanized, Water Based
MPI 138	(2012) Latex, Interior, High Performance Architectural, (MPI Gloss Level 2)
MPI 139	(2012) Latex, Interior, High Performance Architectural, (MPI Gloss Level 3)
MPI 140	(2012) Latex, Interior, High Performance Architectural, (MPI Gloss Level 4)
MPI 141	(2012) Latex, Interior, High Performance Architectural, Semi-Gloss (MPI Gloss Level 5)
MPI 144	(2012) Latex, Interior, Institutional Low Odor/VOC, (MPI Gloss Level 2)
MPI 145	(2012) Latex, Interior, Institutional Low Odor/VOC, (MPI Gloss Level 3)
MPI 146	(2012) Latex, Interior, Institutional Low Odor/VOC, (MPI Gloss Level 4)

MPI 147	(May 2016) Latex, Interior, Institutional Low Odor/VOC, Semi-Gloss (MPI Gloss Level 5)
MPI 151	(2012) Light Industrial Coating, Interior, Water Based (MPI Gloss Level 3)
MPI 153	(2012) Light Industrial Coating, Interior, Water Based, Semi-Gloss (MPI Gloss Level 5)
MPI 154	(2012) Light Industrial Coating, Interior, Water Based, Gloss (MPI Gloss Level 6)
MPI 16	(2012) Stain, Exterior, Water Based, Solid Hide
MPI 161	(2012) Light Industrial Coating, Exterior, Water Based (MPI Gloss Level 3)
MPI 163	(2012) Light Industrial Coating, Exterior, Water Based, Semi-Gloss (MPI Gloss Level 5)
MPI 164	(2012) Light Industrial Coating, Exterior, Water Based, Gloss (MPI Gloss Level 6)
MPI 19	(2012) Primer, Zinc Rich, Inorganic
MPI 2	(2012) Aluminum Heat Resistant Enamel (up to 427 C and 800 F)
MPI 21	(2012) Heat Resistant Coating, (Up to 205°C/402°F), MPI Gloss Level 6
MPI 22	(2012) Aluminum Paint, High Heat (up to 590° C/1100° F)
MPI 23	(2012) Primer, Metal, Surface Tolerant
MPI 26	(2012) Primer, Galvanized Metal, Cementitious
MPI 27	(2012) Floor Enamel, Alkyd, Gloss (MPI Gloss Level 6)
MPI 31	(2012) Varnish, Polyurethane, Moisture Cured, Gloss (MPI Gloss Level 6)
MPI 39	(2012) Primer, Latex, for Interior Wood
MPI 4	(2012) Interior/Exterior Latex Block Filler
MPI 42	(2012) Textured Coating, Latex, Flat
MPI 44	(2012) Latex, Interior, (MPI Gloss Level 2)
MPI 45	(2012) Primer Sealer, Interior Alkyd

MPI 46	(2012) Undercoat, Enamel, Interior
MPI 47	(2012) Alkyd, Interior, Semi-Gloss (MPI Gloss Level 5)
MPI 48	(2012) Alkyd, Interior, Gloss (MPI Gloss Level 6-7)
MPI 49	(2012) Alkyd, Interior, Flat (MPI Gloss Level 1)
MPI 5	(2012) Primer, Exterior Alkyd Wood
MPI 50	(2012) Primer Sealer, Latex, Interior
MPI 51	(2012) Alkyd, Interior, (MPI Gloss Level 3)2
MPI 52	(2012) Latex, Interior, (MPI Gloss Level 3)
MPI 54	(2012) Latex, Interior, Semi-Gloss (MPI Gloss Level 5)
MPI 56	(2012) Varnish, Interior, Polyurethane, Oil Modified, Gloss
MPI 57	(2012) Varnish, Interior, Polyurethane, Oil Modified, Satin
MPI 59	(2012) Floor Paint, Alkyd, Low Gloss
MPI 6	(2012) Primer, Exterior Latex Wood
MPI 60	(2012) Floor Paint, Latex, Low Gloss
MPI 68	(2012) Floor Paint, Latex, Gloss
MPI 7	(Oct 2009) Exterior Oil Wood Primer
MPI 71	(2012) Varnish, Polyurethane, Moisture Cured, Flat (MPI Gloss Level 1)
MPI 72	(2012) Polyurethane, Two-Component, Pigmented, Gloss (MPI Gloss Level 6-7)
MPI 77	(2012) Epoxy, Gloss
MPI 79	(2012) Primer, Alkyd, Anti-Corrosive for Metal
MPI 8	(2012) Alkyd, Exterior Flat (MPI Gloss Level 1)
MPI 9	(2012) Alkyd, Exterior Gloss (MPI Gloss Level 6)

MPI 90	(2012) Stain, Semi-Transparent, for Interior Wood
MPI 94	(2012) Alkyd, Exterior, Semi-Gloss (MPI Gloss Level 5)
MPI 95	(2012) Primer, Quick Dry, for Aluminum

SCIENTIFIC CERTIFICATION SYSTEMS (SCS)

SCS	SCS Global Services (SCS) Indoor Advantage
SCS SP-01	(2000) Environmentally Preferable Product Specification for Architectural and Anti-Corrosive Paints

SOCIETY FOR PROTECTIVE COATINGS (SSPC)

SSPC 7/NACE No.4	(2007; E 2004) Brush-Off Blast Cleaning
SSPC Guide 6	(2015) Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations
SSPC Guide 7	(2004; E 2004) Guide to the Disposal of Lead-Contaminated Surface Preparation Debris
SSPC PA 1	(2016) Shop, Field, and Maintenance Coating of Metals
SSPC PA Guide 3	(1982; E 1995) A Guide to Safety in Paint Application
SSPC Paint 18	(1982; E 2004) Chlorinated Rubber Intermediate Coat Paint
SSPC QP 1	(2012; E 2012) Standard Procedure for Evaluating Painting Contractors (Field Application to Complex Industrial Structures)
SSPC SP 1	(2015) Solvent Cleaning
SSPC SP 10/NACE No. 2	(2007) Near-White Blast Cleaning
SSPC SP 12/NACE No.5	(2002) Surface Preparation and Cleaning of Metals by Waterjetting Prior to Recoating
SSPC SP 2	(1982; E 2000; E 2004) Hand Tool Cleaning
SSPC SP 3	(1982; E 2004) Power Tool Cleaning
SSPC SP 6/NACE No.3	(2007) Commercial Blast Cleaning
SSPC VIS 1	(2002; E 2004) Guide and Reference Photographs for Steel Surfaces Prepared by

	Dry Abrasive Blast Cleaning
SSPC VIS 3	(2004) Guide and Reference Photographs for Steel Surfaces Prepared by Hand and Power Tool Cleaning
SSPC VIS 4/NACE VIS 7	(1998; E 2000; E 2004) Guide and Reference Photographs for Steel Surfaces Prepared by Waterjetting
U.S. ARMY CORPS OF ENGINEERS (USACE)	
EM 385-1-1	(2014) Safety and Health Requirements Manual
U.S. DEPARTMENT OF DEFENSE (DOD)	
MIL-PRF-680	(2010; Rev C; Notice 1 2015) Degreasing Solvent
MIL-STD-101	(2014; Rev C) Color Code for Pipelines and for Compressed Gas Cylinders
U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)	
EPA Method 24	(2000) Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings
U.S. FEDERAL AVIATION ADMINISTRATION (FAA)	
FAA AC 70/7460-1	(2015; Rev L) Obstruction Marking and Lighting
U.S. GENERAL SERVICES ADMINISTRATION (GSA)	
FED-STD-313	(2014; Rev E) Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities
FED-STD-595	(Rev C; Notice 1) Colors Used in Government Procurement
U.S. GREEN BUILDING COUNCIL (USGBC)	
LEED NC	(2009) Leadership in Energy and Environmental Design(tm) New Construction Rating System
U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)	
29 CFR 1910.1000	Air Contaminants
29 CFR 1910.1001	Asbestos

29 CFR 1910.1025

Lead

29 CFR 1926.62

Lead

UL ENVIRONMENT (ULE)

ULE Greenguard

UL Greenguard Certification Program

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor Quality Control approval.][for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submittals with an "S" are for inclusion in the Sustainability eNotebook, in conformance to Section 01 33 29 SUSTAINABILITY REPORTING. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

The current MPI, "Approved Product List" which lists paint by brand, label, product name and product code as of the date of contract award, will be used to determine compliance with the submittal requirements of this specification. The Contractor may choose to use a subsequent MPI "Approved Product List", however, only one list may be used for the entire contract and each coating system is to be from a single manufacturer. All coats on a particular substrate must be from a single manufacturer. No variation from the MPI Approved Products List is acceptable.

Samples of specified materials may be taken and tested for compliance with specification requirements.

SD-02 Shop Drawings

Piping identification

Submit color stencil codes

SD-03 Product Data

Certification

Coating;

Manufacturer's Technical Data Sheets

[Sealant]

SD-04 Samples

Color

SD-07 Certificates

Applicator's qualifications

Qualification Testing laboratory for coatings

SD-08 Manufacturer's Instructions

Application instructions

Mixing

Detailed mixing instructions, minimum and maximum application temperature and humidity, potlife, and curing and drying times between coats.

Manufacturer's Safety Data Sheets

Submit manufacturer's Safety Data Sheets for coatings, solvents, and other potentially hazardous materials, as defined in **FED-STD-313**.

SD-10 Operation and Maintenance Data

Coatings

Preprinted cleaning and maintenance instructions for all coating systems shall be provided.

1.3 APPLICATOR'S QUALIFICATIONS

1.3.1 Contractor Qualification

Submit the name, address, telephone number, and e-mail address of the contractor that will be performing all surface preparation and coating application. Submit evidence that key personnel have successfully performed surface preparation and application of coatings on a minimum of three similar projects within the past **five** years. List information by individual and include the following:

- a. Name of individual and proposed position for this work.
- b. Information about each previous assignment including:

Position or responsibility

Employer (if other than the Contractor)

Name of facility owner

Mailing address, telephone number, and telex number (if non-US) of facility owner

Name of individual in facility owner's organization who can be contacted as a reference

Location, size and description of structure

Dates work was carried out

Description of work carried out on structure

]

1.4 QUALITY ASSURANCE

1.4.1 Field Samples and Tests

The Contracting Officer may choose up to two coatings that have been delivered to the site to be tested at no cost to the Government. Take samples of each chosen product as specified in the paragraph "Sampling Procedures." Test each chosen product as specified in the paragraph "Testing Procedure." Products which do not conform, shall be removed from the job site and replaced with new products that conform to the referenced specification. Testing of replacement products that failed initial testing shall be at no cost to the Government.

1.4.1.1 Sampling Procedure

The Contracting Officer will select paint at random from the products that have been delivered to the job site for sample testing. The Contractor shall provide [one quart](#) samples of the selected paint materials. The samples shall be taken in the presence of the Contracting Officer, and labeled, identifying each sample. Provide labels in accordance with the paragraph "Packaging, Labeling, and Storage" of this specification.

1.4.1.2 Testing Procedure

Provide Batch Quality Conformance Testing for specified products, as defined by and performed by MPI. As an alternative to Batch Quality Conformance Testing, the Contractor may provide [Qualification Testing](#) for specified products above to the appropriate MPI product specification, using the third-party laboratory approved under the paragraph "Qualification Testing" laboratory for coatings. The qualification testing lab report shall include the backup data and summary of the test results. The summary shall list all of the reference specification requirements and the result of each test. The summary shall clearly indicate whether the tested paint meets each test requirement. Note that Qualification Testing may take 4 to 6 weeks to perform, due to the extent of testing required.

Submit name, address, telephone number, FAX number, and e-mail address of the independent third party laboratory selected to perform testing of coating samples for compliance with specification requirements. Submit documentation that laboratory is regularly engaged in testing of paint samples for conformance with specifications, and that employees performing testing are qualified. If the Contractor chooses MPI to perform the Batch Quality Conformance testing, the above submittal information is not required, only a letter is required from the Contractor stating that MPI will perform the testing.

1.4.2 [Sample Textured Wall Coating System Mock-Up](#)

After coating samples are approved, and prior to starting installation, a

minimum 8 foot by 8 foot mock-up shall be provided for each substrate and for each color and type of textured wall coating, using the actual substrate materials. Once approved the mock-up samples shall be used as a standard of workmanship for installation within the facility. At least 48 hours prior to mock-up installation, the Contractor shall submit written notification to the Contracting Officer's Representative.

1.5 REGULATORY REQUIREMENTS

1.5.1 Environmental Protection

In addition to requirements specified elsewhere for environmental protection, provide coating materials that conform to the restrictions of the local Air Pollution Control District and regional jurisdiction. Notify Contracting Officer of any paint specified herein which fails to conform.

1.5.2 Lead Content

Do not use coatings having a lead content over 0.06 percent by weight of nonvolatile content.

1.5.3 Chromate Content

Do not use coatings containing zinc-chromate or strontium-chromate.

1.5.4 Asbestos Content

Materials shall not contain asbestos.

1.5.5 Mercury Content

Materials shall not contain mercury or mercury compounds.

1.5.6 Silica

Abrasive blast media shall not contain free crystalline silica.

1.5.7 Human Carcinogens

Materials shall not contain ACGIH 0100 confirmed human carcinogens (A1) or suspected human carcinogens (A2).

1.6 PACKAGING, LABELING, AND STORAGE

Paints shall be in sealed containers that legibly show the contract specification number, designation name, formula or specification number, batch number, color, quantity, date of manufacture, manufacturer's formulation number, manufacturer's directions including any warnings and special precautions, and name and address of manufacturer. Pigmented paints shall be furnished in containers not larger than 5 gallons. Paints and thinners shall be stored in accordance with the manufacturer's written directions, and as a minimum, stored off the ground, under cover, with sufficient ventilation to prevent the buildup of flammable vapors, and at temperatures between 40 to 95 degrees F.

1.7 SAFETY AND HEALTH

Apply coating materials using safety methods and equipment in accordance with the following:

Work shall comply with applicable Federal, State, and local laws and regulations, and with the ACCIDENT PREVENTION PLAN, including the Activity Hazard Analysis as specified in Section 01 35 26 GOVERNMENT SAFETY REQUIREMENTS and in Appendix A of EM 385-1-1. The Activity Hazard Analysis shall include analyses of the potential impact of painting operations on painting personnel and on others involved in and adjacent to the work zone.

1.7.1 Safety Methods Used During Coating Application

Comply with the requirements of SSPC PA Guide 3.

1.7.2 Toxic Materials

To protect personnel from overexposure to toxic materials, conform to the most stringent guidance of:

- a. The applicable manufacturer's Safety Data Sheets (SDS) or local regulation.
- b. 29 CFR 1910.1000.
- c. ACGIH 0100, threshold limit values.
- [d. The appropriate OSHA standard in 29 CFR 1910.1025 and 29 CFR 1926.62 for surface preparation on painted surfaces containing lead. Removal and disposal of coatings which contain lead is specified in [Section 02 83 19.13 10 LEAD-BASED PAINT ABATEMENT][Section 02 83 13.00 20 LEAD IN CONSTRUCTION][Section 02 82 33.13 20 REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD][____]."] Additional guidance is given in SSPC Guide 6 and SSPC Guide 7. Refer to drawings for list of hazardous materials located on this project. Contractor to coordinate paint preparation activities with this specification section.
-] e. The appropriate OSHA standards in 29 CFR 1910.1001 for surface preparation of painted surfaces containing asbestos. Removal and disposal of coatings which contain asbestos materials is specified in [Section 02 82 16.00 20 ENGINEERING CONTROL OF ASBESTOS CONTAINING MATERIALS][Section 02 82 13.00 10 ASBESTOS ABATEMENT]. Refer to drawings for list of hazardous materials located on this project. Contractor to coordinate paint preparation activities with this specification section.

1.8 ENVIRONMENTAL CONDITIONS

Comply, at minimum, with manufacturer recommendations for space ventilation during and after installation. [Isolate area of application from rest of building when applying high-emission paints or coatings.]

1.8.1 Coatings

Do not apply coating when air or substrate conditions are:

- a. Less than 5 degrees F above dew point;

- b. Below 50 degrees F or over 95 degrees F, unless specifically pre-approved by the Contracting Officer and the product manufacturer. Under no circumstances shall application conditions exceed manufacturer recommendations.

1.9 SUSTAINABLE DESIGN REQUIREMENTS

1.9.1 Local/Regional Materials

[Use materials or products extracted, harvested, or recovered, as well as manufactured, within a [200] mile radius from the project site, if available from a minimum of three sources. Paint and coating materials may be locally available.

1.10 COLOR SELECTION

[Color Coding For Shore-To-Ship Utility Connections: Paint hose connection fittings and shut-off valves the designated color. In addition to color coding provide 2 inch high stenciled letters using black stencil paint, clearly designating service for each connection.

Color Coding for Shore-to-Ship Utility Connections

<u>Service</u>	<u>Color</u>	<u>FED-STD-595 No.</u>
Potable Water*	Blue	15044
Water Provided for Fire Protection**	Red	11105
Chilled Water	Striped Blue/White	15044/17886
Oily Waste Water	Striped Yellow/Black	13538/17038
Sewer	Gold	17043
Steam	White	17886
High Pressure Air	Gray	16081
Low Pressure Air	Tan	10324
Fuel	Yellow	13655

* This includes connections serving domestic functions.

** This includes non-potable salt water or, at some locations, fresh water connections provided for fire protection (may also include flushing and cooling requirements). Note: This does not include waterfront fire hydrants.

] Colors of finish coats shall be as indicated or specified. Where not indicated or specified, colors shall be selected by the Contracting Officer. Manufacturers' names and color identification are used for the purpose of color identification only. Named products are acceptable for use only if they conform to specified requirements. Products of other

manufacturers are acceptable if the colors approximate colors indicated and the product conforms to specified requirements.

1.11 LOCATION AND SURFACE TYPE TO BE PAINTED

1.11.1 Painting Included

Where a space or surface is indicated to be painted, include the following unless indicated otherwise.

- a. Surfaces behind portable objects and surface mounted articles readily detachable by removal of fasteners, such as screws and bolts.
- b. New factory finished surfaces that require identification or color coding and factory finished surfaces that are damaged during performance of the work.
- c. Existing coated surfaces that are damaged during performance of the work.

1.11.1.1 Exterior Painting

Includes new surfaces[, existing coated surfaces,] [and] [existing uncoated surfaces,] of the building[s] and appurtenances. Also included are existing coated surfaces made bare by cleaning operations.

1.11.1.2 Interior Painting

Includes new surfaces[, existing uncoated surfaces,] [and] [existing coated surfaces] of the building[s] and appurtenances as indicated and existing coated surfaces made bare by cleaning operations. Where a space or surface is indicated to be painted, include the following items, unless indicated otherwise.

- a. Exposed columns, girders, beams, joists, and metal deck; and
- b. Other contiguous surfaces.

1.11.2 Painting Excluded

Do not paint the following unless indicated otherwise.

- a. Surfaces concealed and made inaccessible by panelboards, fixed ductwork, machinery, and equipment fixed in place.
- b. Surfaces in concealed spaces. Concealed spaces are defined as enclosed spaces above suspended ceilings, furred spaces, attic spaces, crawl spaces, elevator shafts and chases.
- c. Steel to be embedded in concrete.
- d. Copper, stainless steel, aluminum, brass, and lead except existing coated surfaces.
- e. Hardware, fittings, and other factory finished items.

[
1.11.3 Definitions and Abbreviations

1.11.3.1 Qualification Testing

Qualification testing is the performance of all test requirements listed in the product specification. This testing is accomplished by MPI to qualify each product for the MPI Approved Product List, and may also be accomplished by Contractor's third party testing lab if an alternative to Batch Quality Conformance Testing by MPI is desired.

1.11.3.2 Batch Quality Conformance Testing

Batch quality conformance testing determines that the product provided is the same as the product qualified to the appropriate product specification. This testing shall only be accomplished by MPI testing lab.

1.11.3.3 Coating

A film or thin layer applied to a base material called a substrate. A coating may be a metal, alloy, paint, or solid/liquid suspensions on various substrates (metals, plastics, wood, paper, leather, cloth, etc.). They may be applied by electrolysis, vapor deposition, vacuum, or mechanical means such as brushing, spraying, calendaring, and roller coating. A coating may be applied for aesthetic or protective purposes or both. The term "coating" as used herein includes emulsions, enamels, stains, varnishes, sealers, epoxies, and other coatings, whether used as primer, intermediate, or finish coat. The terms paint and coating are used interchangeably.

1.11.3.4 DFT or dft

Dry film thickness, the film thickness of the fully cured, dry paint or coating.

1.11.3.5 DSD

Degree of Surface Degradation, the MPI system of defining degree of surface degradation. Five (5) levels are generically defined under the Assessment sections in the MPI Maintenance Repainting Manual.

1.11.3.6 EPP

Environmentally Preferred Products, a standard for determining environmental preferability in support of Executive Order 13101.

1.11.3.7 EXT

MPI short term designation for an exterior coating system.

1.11.3.8 INT

MPI short term designation for an interior coating system.

1.11.3.9 micron / microns

The metric measurement for 0.001 mm or one/one-thousandth of a millimeter.

1.11.3.10 mil / mils

The English measurement for 0.001 in or one/one-thousandth of an inch, equal to 25.4 microns or 0.0254 mm.

1.11.3.11 mm

The metric measurement for millimeter, 0.001 meter or one/one-thousandth of a meter.

1.11.3.12 MPI Gloss Levels

MPI system of defining gloss. Seven (7) gloss levels (G1 to G7) are generically defined under the Evaluation sections of the MPI Manuals. Traditionally, Flat refers to G1/G2, Eggshell refers to G3, Semigloss refers to G5, and Gloss refers to G6.

Gloss levels are defined by MPI as follows:

Gloss Level	Description	Units at 60 degrees	Units at 85 degrees
G1	Matte or Flat	0 to 5	10 max
G2	Velvet	0 to 10	10 to 35
G3	Eggshell	10 to 25	10 to 35
G4	Satin	20 to 35	35 min
G5	Semi-Gloss	35 to 70	
G6	Gloss	70 to 85	
G7	High Gloss		

Gloss is tested in accordance with [ASTM D523](#). Historically, the Government has used Flat (G1 / G2), Eggshell (G3), Semi-Gloss (G5), and Gloss (G6).

1.11.3.13 MPI System Number

The MPI coating system number in each Division found in either the MPI Architectural Painting Specification Manual or the Maintenance Repainting Manual and defined as an exterior (EXT/REX) or interior system (INT/RIN). The Division number follows the CSI Master Format.

1.11.3.14 Paint

See Coating definition.

1.11.3.15 REX

MPI short term designation for an exterior coating system used in repainting projects or over existing coating systems.

1.11.3.16 RIN

MPI short term designation for an interior coating system used in repainting projects or over existing coating systems.

PART 2 PRODUCTS

2.1 [MATERIALS](#)

Conform to the [coating](#) specifications and standards referenced in PART 3. Submit [manufacturer's technical data sheets](#) for specified [coatings](#) and solvents. [Minimum [20][50][_____] percent post-consumer recycled content for the following light-colored paints and primers: [_____]]. Minimum [50][90][99][_____] percent post-consumer recycled content for the following dark-colored paints and primers: [_____]]. [All][The following] consolidated latex paints shall contain a minimum of [100][_____] percent post-consumer recycled content[: [_____]].] Comply with applicable regulations regarding toxic and hazardous materials.

PART 3 EXECUTION

3.1 PROTECTION OF AREAS AND SPACES NOT TO BE PAINTED

Prior to surface preparation and coating applications, remove, mask, or otherwise protect, hardware, hardware accessories, machined surfaces, radiator covers, plates, lighting fixtures, public and private property, and other such items not to be coated that are in contact with surfaces to be coated. Following completion of painting, workmen skilled in the trades involved shall reinstall removed items. Restore surfaces contaminated by coating materials, to original condition and repair damaged items.

3.2 REPUTTYING AND REGLAZING

Remove cracked, loose, and defective putty or glazing compound on glazed sash and provide new putty or glazing compound. Where defective putty or glazing compound constitutes 30 percent or more of the putty at any one light, remove the glass and putty or glazing compound and reset the glass. Remove putty or glazing compound without damaging sash or glass. Clean rabbets to bare wood or metal and prime prior to reglazing. Putty for wood sash shall be a linseed oil putty. Patch surfaces to provide smooth transition between existing and new surfaces. Finish putty or glazing compound to a neat and true bead. Allow glazing compound time to cure, in accordance with manufacturer's recommendation, prior to coating application. Allow putty to set one week prior to coating application.

3.3 RESEALING OF EXISTING EXTERIOR JOINTS

3.3.1 Surface Condition

Surfaces shall be clean, dry to the touch, and free from frost and moisture; remove grease, oil, wax, lacquer, paint, defective backstop, or other foreign matter that would prevent or impair adhesion. Where adequate grooves have not been provided, clean out to a depth of [1/2 inch](#) and grind to a minimum width of [1/4 inch](#) without damage to adjoining work. Grinding shall not be required on metal surfaces.

3.3.2 Backstops

In joints more than [1/2 inch](#) deep, install glass fiber roving or neoprene, butyl, polyurethane, or polyethylene foams free of oil or other staining elements as recommended by sealant manufacturer. Backstop material shall be compatible with sealant. Do not use oakum and other types of absorptive materials as backstops.

3.3.3 Primer and Bond Breaker

Install the type recommended by the sealant manufacturer.

3.3.4 Ambient Temperature

Between 38 degrees F and 95 degrees F when applying sealant.

3.3.5 Exterior Sealant

For joints in vertical surfaces, provide ASTM C920, Type S or M, Grade NS, Class 25, Use NT. For joints in horizontal surfaces, provide ASTM C920, Type S or M, Grade P, Class 25, Use T. Color(s) shall be selected by the Contracting Officer. Apply the sealant in accordance with the manufacturer's printed instructions. Force sealant into joints with sufficient pressure to fill the joints solidly. Sealant shall be uniformly smooth and free of wrinkles.

3.3.6 Cleaning

Immediately remove fresh sealant from adjacent areas using a solvent recommended by the sealant manufacturer. Upon completion of sealant application, remove remaining smears and stains and leave the work in a clean condition. Allow sealant time to cure, in accordance with manufacturer's recommendations, prior to coating.

3.4 SURFACE PREPARATION

Remove dirt, splinters, loose particles, grease, oil, [disintegrated coatings,] and other foreign matter and substances deleterious to coating performance as specified for each substrate before application of paint or surface treatments. Oil and grease shall be removed prior to mechanical cleaning. Cleaning shall be programmed so that dust and other contaminants will not fall on wet, newly painted surfaces. Exposed ferrous metals such as nail heads on or in contact with surfaces to be painted with water-thinned paints, shall be spot-primed with a suitable corrosion-inhibitive primer capable of preventing flash rusting and compatible with the coating specified for the adjacent areas.

3.4.1 Additional Requirements for Preparation of Surfaces With Existing Coatings

Before application of coatings, perform the following on surfaces covered by soundly-adhered coatings, defined as those which cannot be removed with a putty knife:

- a. Test existing finishes for lead before sanding, scraping, or removing. If lead is present, refer to paragraph Toxic Materials.
- b. Wipe previously painted surfaces to receive solvent-based coatings, except stucco and similarly rough surfaces clean with a clean, dry cloth saturated with mineral spirits, ASTM D235. Allow surface to dry. Wiping shall immediately precede the application of the first coat of any coating, unless specified otherwise.
- c. Sand existing glossy surfaces to be painted to reduce gloss. Brush, and wipe clean with a damp cloth to remove dust.
- d. The requirements specified are minimum. Comply also with the

application instructions of the paint manufacturer.

- e. Previously painted surfaces [specified to be repainted] [damaged during construction] shall be thoroughly cleaned of all grease, dirt, dust or other foreign matter.
- f. Blistering, cracking, flaking and peeling or other deteriorated coatings shall be removed.
- g. Chalk shall be removed so that when tested in accordance with ASTM D4214, the chalk resistance rating is no less than 8.
- h. Slick surfaces shall be roughened. Damaged areas such as, but not limited to, nail holes, cracks, chips, and spalls shall be repaired with suitable material to match adjacent undamaged areas.
- i. Edges of chipped paint shall be feather edged and sanded smooth.
- j. Rusty metal surfaces shall be cleaned as per SSPC requirements. Solvent, mechanical, or chemical cleaning methods shall be used to provide surfaces suitable for painting.
- k. New, proposed coatings shall be compatible with existing coatings.

3.4.2 Existing Coated Surfaces with Minor Defects

[Sand, spackle, and treat minor defects to render them smooth. Minor defects are defined as scratches, nicks, cracks, gouges, spalls, alligatoring, chalking, and irregularities due to partial peeling of previous coatings.] [Remove chalking by sanding [or blasting] so that when tested in accordance with ASTM D4214, the chalk rating is not less than 8.]

3.4.3 Removal of Existing Coatings

Remove existing coatings from the following surfaces:

- a. Surfaces containing large areas of minor defects;
- b. Surfaces containing more than 20 percent peeling area; and
- c. Surfaces designated by the Contracting Officer, such as surfaces where rust shows through existing coatings.

3.4.4 Substrate Repair

- a. Repair substrate surface damaged during coating removal;
- b. Sand edges of adjacent soundly-adhered existing coatings so they are tapered as smooth as practical to areas involved with coating removal; and
- c. Clean and prime the substrate as specified.

3.5 PREPARATION OF METAL SURFACES

3.5.1 Existing and New Ferrous Surfaces

- a. Ferrous Surfaces including Shop-coated Surfaces and Small Areas That Contain Rust, Mill Scale and Other Foreign Substances: [Solvent clean] [or] [detergent wash] in accordance with [SSPC SP 1](#) to remove oil and grease. Where shop coat is missing or damaged, clean according to [[SSPC SP 2](#)], [[SSPC SP 3](#)], [[SSPC SP 6/NACE No.3](#)], or [[SSPC SP 10/NACE No. 2](#)]. [Brush-off blast remaining surface in accordance with [SSPC 7/NACE No.4](#)]; [Water jetting to [SSPC SP 12/NACE No.5](#) WJ-4 may be used to remove loose coating and other loose materials. Use inhibitor as recommended by coating manufacturer to prevent premature rusting.] Shop-coated ferrous surfaces shall be protected from corrosion by treating and touching up corroded areas immediately upon detection.
- b. Surfaces With More Than 20 Percent Rust, Mill Scale, and Other Foreign Substances: Clean entire surface in accordance with [[SSPC SP 6/NACE No.3/SSPC SP 12/NACE No.5](#) WJ-3] [[SSPC SP 10/NACE No. 2/SSPC SP 12/NACE No.5](#) WJ-2].
- [c. Metal Floor Surfaces to Receive Nonslip Coating: Clean in accordance with [[SSPC SP 10/NACE No. 2](#)] [[SSPC SP 12/NACE No.5](#) WJ-2].

3.5.2 Final Ferrous Surface Condition:

For tool cleaned surfaces, the requirements are stated in [SSPC SP 2](#) and [SSPC SP 3](#). As a visual reference, cleaned surfaces shall be similar to photographs in [SSPC VIS 3](#).

For abrasive blast cleaned surfaces, the requirements are stated in [SSPC 7/NACE No.4](#), [SSPC SP 6/NACE No.3](#), and [SSPC SP 10/NACE No. 2](#). As a visual reference, cleaned surfaces shall be similar to photographs in [SSPC VIS 1](#).

For waterjet cleaned surfaces, the requirements are stated in [SSPC SP 12/NACE No.5](#). As a visual reference, cleaned surfaces shall be similar to photographs in [SSPC VIS 4/NACE VIS 7](#).

3.5.3 Galvanized Surfaces

- a. New or Existing Galvanized Surfaces With Only Dirt and Zinc Oxidation Products: Clean with [solvent,] [steam,] [or] [non-alkaline detergent solution] in accordance with [SSPC SP 1](#). If the galvanized metal has been passivated or stabilized, the coating shall be completely removed by brush-off abrasive blast. New galvanized steel to be coated shall not be "passivated" or "stabilized" If the absence of hexavalent stain inhibitors is not documented, test as described in [ASTM D6386](#), Appendix X2, and remove by one of the methods described therein.
- b. Galvanized with Slight Coating Deterioration or with Little or No Rusting: Water jetting to [SSPC SP 12/NACE No.5](#) WJ3 to remove loose coating from surfaces with less than 20 percent coating deterioration and no blistering, peeling, or cracking. Use inhibitor as recommended by the coating manufacturer to prevent rusting.
- c. Galvanized With Severe Deteriorated Coating or Severe Rusting: [Water jet to [SSPC SP 12/NACE No.5](#) WJ3 degree of cleanliness.] [Spot abrasive blast rusted areas as described for steel in [SSPC SP 6/NACE No.3](#), and waterjet to [SSPC SP 12/NACE No.5](#), WJ3 to remove existing coating.]

3.5.4 Non-Ferrous Metallic Surfaces

Aluminum and aluminum-alloy, lead, copper, and other nonferrous metal surfaces.

Surface Cleaning: Solvent clean in accordance with [SSPC SP 1](#) and wash with mild non-alkaline detergent to remove dirt and water soluble contaminants.

3.5.5 Terne-Coated Metal Surfaces

Solvent clean surfaces with mineral spirits, [ASTM D235](#). Wipe dry with clean, dry cloths.

3.5.6 Existing Surfaces with a Bituminous or Mastic-Type Coating

Remove chalk, mildew, and other loose material by washing with a solution of [1/2 cup](#) trisodium phosphate, [1/4 cup](#) household detergent, [one quart](#) 5 percent sodium hypochlorite solution and [3 quarts](#) of warm water.

3.6 PREPARATION OF CONCRETE AND CEMENTITIOUS SURFACE

3.6.1 Concrete and Masonry

a. Curing: Concrete, stucco and masonry surfaces shall be allowed to cure at least 30 days before painting, except concrete slab on grade, which shall be allowed to cure 90 days before painting.

b. Surface Cleaning: Remove the following deleterious substances.

(1) Dirt, [Chalking,] Grease, and Oil: Wash new [and existing uncoated] surfaces with a solution composed of [1/2 cup](#) trisodium phosphate, [1/4 cup](#) household detergent, and [4 quarts](#) of warm water. Then rinse thoroughly with fresh water. [Wash existing coated surfaces with a suitable detergent and rinse thoroughly.] For large areas, water blasting may be used.

(2) Fungus and Mold: Wash [new] [, existing coated,] [and existing uncoated] surfaces with a solution composed of [1/2 cup](#) trisodium phosphate, [1/4 cup](#) household detergent, [1 quart](#) 5 percent sodium hypochlorite solution and [3 quarts](#) of warm water. Rinse thoroughly with fresh water.

(3) Paint and Loose Particles: Remove by wire brushing.

(4) Efflorescence: Remove by scraping or wire brushing followed by washing with a 5 to 10 percent by weight aqueous solution of hydrochloric (muriatic) acid. Do not allow acid to remain on the surface for more than five minutes before rinsing with fresh water. Do not acid clean more than [4 square feet](#) of surface, per workman, at one time.

[(5) Removal of Existing Coatings: For surfaces to receive textured coating [MPI 42](#), remove existing coatings including soundly adhered coatings if recommended by textured coating manufacturer.

] c. Cosmetic Repair of Minor Defects: Repair or fill mortar joints and minor defects, including but not limited to spalls, in accordance with

manufacturer's recommendations and prior to coating application.

- d. Allowable Moisture Content: Latex coatings may be applied to damp surfaces, but not to surfaces with droplets of water. Do not apply epoxies to damp vertical surfaces as determined by [ASTM D4263](#) or horizontal surfaces that exceed 3 lbs of moisture per 1000 square feet in 24 hours as determined by [ASTM F1869](#). In all cases follow manufacturers recommendations. Allow surfaces to cure a minimum of 30 days before painting.

3.6.2 Gypsum Board, Plaster, and Stucco

- a. Surface Cleaning: Plaster and stucco shall be clean and free from loose matter; gypsum board shall be dry. Remove loose dirt and dust by brushing with a soft brush, rubbing with a dry cloth, or vacuum-cleaning prior to application of the first coat material. A damp cloth or sponge may be used if paint will be water-based.
- b. Repair of Minor Defects: Prior to painting, repair joints, cracks, holes, surface irregularities, and other minor defects with patching plaster or spackling compound and sand smooth.
- c. Allowable Moisture Content: Latex coatings may be applied to damp surfaces, but not surfaces with droplets of water. Do not apply epoxies to damp surfaces as determined by [ASTM D4263](#). New plaster to be coated shall have a maximum moisture content of 8 percent, when measured in accordance with [ASTM D4444](#), Method A, unless otherwise authorized. In addition to moisture content requirements, allow new plaster to age a minimum of 30 days before preparation for painting.

3.7 APPLICATION

3.7.1 Coating Application

Painting practices shall comply with applicable federal, state and local laws enacted to insure compliance with Federal Clean Air Standards. Apply coating materials in accordance with [SSPC PA 1](#). [SSPC PA 1](#) methods are applicable to all substrates, except as modified herein.

At the time of application, paint shall show no signs of deterioration. Uniform suspension of pigments shall be maintained during application.

Unless otherwise specified or recommended by the paint manufacturer, paint may be applied by brush, roller, or spray. Use trigger operated spray nozzles for water hoses. Rollers for applying paints and enamels shall be of a type designed for the coating to be applied and the surface to be coated. Wear protective clothing and respirators when applying oil-based paints or using spray equipment with any paints.

Paints, except water-thinned types, shall be applied only to surfaces that are completely free of moisture as determined by sight or touch.

Thoroughly work coating materials into joints, crevices, and open spaces. Special attention shall be given to insure that all edges, corners, crevices, welds, and rivets receive a film thickness equal to that of adjacent painted surfaces.

Each coat of paint shall be applied so dry film shall be of uniform thickness and free from runs, drops, ridges, waves, pinholes or other voids, laps, brush marks, and variations in color, texture, and finish. Hiding shall be complete.

Touch up damaged coatings before applying subsequent coats.[Interior areas shall be broom clean and dust free before and during the application of coating material.]

- [Apply paint to new fire extinguishing sprinkler systems including valves, piping, conduit, hangers, supports, miscellaneous metal work, and accessories. Shield sprinkler heads with protective coverings while painting is in progress. Remove sprinkler heads which have been painted and replace with new sprinkler heads. For piping in unfinished spaces, provide primed surfaces with one coat of red alkyd gloss enamel to a minimum dry film thickness of 1.0 mil. Unfinished spaces include attic spaces, spaces above suspended ceilings, crawl spaces, pipe chases, mechanical equipment room, and space where walls or ceiling are not painted or not constructed of a prefinished material. For piping in finished areas, provide prime surfaces with two coats of paint to match adjacent surfaces, except provide valves and operating accessories with one coat of red alkyd gloss enamel. Upon completion of painting, remove protective covering from sprinkler heads.
-] a. Drying Time: Allow time between coats, as recommended by the coating manufacturer, to permit thorough drying, but not to present topcoat adhesion problems. Provide each coat in specified condition to receive next coat.
- b. Primers, and Intermediate Coats: Do not allow primers or intermediate coats to dry more than 30 days, or longer than recommended by manufacturer, before applying subsequent coats. Follow manufacturer's recommendations for surface preparation if primers or intermediate coats are allowed to dry longer than recommended by manufacturers of subsequent coatings. Each coat shall cover surface of preceding coat or surface completely, and there shall be a visually perceptible difference in shades of successive coats.
- c. Finished Surfaces: Provide finished surfaces free from runs, drops, ridges, waves, laps, brush marks, and variations in colors.
- d. Thermosetting Paints: Topcoats over thermosetting paints (epoxies and urethanes) should be applied within the overcoating window recommended by the manufacturer.
- e. Floors: [For nonslip surfacing on level floors, as the intermediate coat is applied, cover wet surface completely with almandite garnet, Grit No. 36, with maximum passing U.S. Standard Sieve No. 40 less than 0.5 percent. When the coating is dry, use a soft bristle broom to sweep up excess grit, which may be reused, and vacuum up remaining residue before application of the topcoat.] [For nonslip surfacing on ramps, provide MPI 77 with non-skid additive, applied by roller in accordance with manufacturer's instructions.]

3.7.2 Mixing and Thinning of Paints

Reduce paints to proper consistency by adding fresh paint, except when thinning is mandatory to suit surface, temperature, weather conditions,

application methods, or for the type of paint being used. Obtain written permission from the Contracting Officer to use thinners. The written permission shall include quantities and types of thinners to use.

When thinning is allowed, paints shall be thinned immediately prior to application with not more than [0.125 L] [1 pint] of suitable thinner per [liter.] [gallon.] The use of thinner shall not relieve the Contractor from obtaining complete hiding, full film thickness, or required gloss. Thinning shall not cause the paint to exceed limits on volatile organic compounds. Paints of different manufacturers shall not be mixed.

3.7.3 Two-Component Systems

Two-component systems shall be mixed in accordance with manufacturer's instructions. Any thinning of the first coat to ensure proper penetration and sealing shall be as recommended by the manufacturer for each type of substrate.

3.7.4 Coating Systems

- a. Systems by Substrates: Apply coatings that conform to the respective specifications listed in the following Tables:

Table

Division 3. Exterior Concrete Paint Table
Division 4. Exterior Concrete Masonry Units Paint Table
Division 5. Exterior Metal, Ferrous and Non-Ferrous Paint Table
Division 6. Exterior Wood; Dressed Lumber, Paneling, Decking,
Shingles Paint Table
Division 9: Exterior Stucco Paint Table
Division 10. Exterior Cloth Coverings and Bituminous Coated
Surfaces Paint Table

Division 3. Interior Concrete Paint Table
Division 4. Interior Concrete Masonry Units Paint Table
Division 5. Interior Metal, Ferrous and Non-Ferrous Paint Table
Division 6. Interior Wood Paint Table
Division 9: Interior Plaster, Gypsum Board, Textured Surfaces
Paint Table

- b. Minimum Dry Film Thickness (DFT): Apply paints, primers, varnishes, enamels, undercoats, and other coatings to a minimum dry film thickness of 1.5 mil each coat unless specified otherwise in the Tables. Coating thickness where specified, refers to the minimum dry film thickness.
- c. Coatings for Surfaces Not Specified Otherwise: Coat surfaces which have not been specified, the same as surfaces having similar conditions of exposure.
- d. Existing Surfaces Damaged During Performance of the Work, Including New Patches In Existing Surfaces: Coat surfaces with the following:
 - (1) One coat of primer.
 - (2) One coat of undercoat or intermediate coat.

(3) One topcoat to match adjacent surfaces.

- e. Existing Coated Surfaces To Be Painted: Apply coatings conforming to the respective specifications listed in the Tables herein, except that pretreatments, sealers and fillers need not be provided on surfaces where existing coatings are soundly adhered and in good condition. Do not omit undercoats or primers.

3.8 COATING SYSTEMS FOR CONCRETE AND CEMENTITIOUS SUBSTRATES

Apply coatings of Tables in Division 3, 4 and 9 for Exterior and Interior.

3.9 INSPECTION AND ACCEPTANCE

In addition to meeting previously specified requirements, demonstrate mobility of moving components, including swinging and sliding doors, cabinets, and windows with operable sash, for inspection by the Contracting Officer. Perform this demonstration after appropriate curing and drying times of coatings have elapsed and prior to invoicing for final payment.

3.10 WASTE MANAGEMENT

As specified in the Waste Management Plan and as follows. Do not use kerosene or any such organic solvents to clean up water based paints. Properly dispose of paints or solvents in designated containers. Close and seal partially used containers of paint to maintain quality as necessary for reuse. Store in protected, well-ventilated, fire-safe area at moderate temperature. Place materials defined as hazardous or toxic waste in designated containers. [Coordinate with manufacturer for take-back program. Set aside scrap to be returned to manufacturer for recycling into new product. When such a service is not available, local recyclers shall be sought after to reclaim the materials.] [Set aside extra paint for future color matches or reuse by the Government.] [Where local options exist for leftover paint recycling, collect all waste paint by type and provide for delivery to recycling or collection facility for reuse by local organizations.]

-- End of Section --

EXHIBIT I: Submittal Log

[illegible]

Attachment 2

UNIFORM GENERAL CONDITIONS FOR PUBLIC WORKS CONTRACTS OF PUERTO RICO

Attachment 3

**CONTRACT CLAUSES REQUIRED IN
PURCHASES AND CONTRACTS WITH
FEDERAL FUNDS**



Contract Clauses Required in Purchases and Contracts with Federal Funds

“Cláusulas Contractuales Requeridas en Compras y Contratos con Fondos Federales”

(2 C.F.R. PART 200, Appendix II)

Any acquisition to be paid with partial or completely federal funds, must comply with all the terms and conditions included as part of this quote request. Any supplier interested in participating in this process, agrees to comply with each of the terms and conditions set forth herein. The Contractor certifies that is in compliance with the requirements established by state laws and regulations and federal regulations established in 2 CFR §200.

“Cualquier adquisición a ser pagada con fondos parciales o completamente federales, debe cumplir con todos los términos y condiciones incluidos como parte de esta solicitud de cotización. Cualquier proveedor interesado en participar en este proceso, se compromete a cumplir con cada uno de los términos y condiciones aquí establecidos. El Contratista certifica que cumplirá con los requisitos establecidos por las leyes y reglamentos estatales y los reglamentos federales establecidos en 2 CFR §200.”

1. **Record retention and access to records** The Contractor and the Agency shall afford any authorized representative of NGB, DoD or the Comptroller General of the United States access to and the right to examine all records, books, papers and documents that are parts of this contract. The Agency and the contractor agree to comply with the record retention and provide, as is required, all intact record for at least ten (10) years following closeout of the award.

“El Contratista y la Agencia otorgarán a cualquier representante autorizado de NGB, DoD o el Contralor General de los Estados Unidos acceso y el derecho de examinar todos los registros, libros y documentos que forman parte de este contrato. La Agencia y el contratista acuerdan cumplir con la retención de registros y proporcionar, si es necesario, todos los registros intactos durante al menos diez (10) años después del cierre de la adjudicación.”

2. **Clean Air Act. Water Pollution Control Act (APLICA A CONSTRUCCION DE \$150,000 O MÁS)** The Contractor and the Agency agrees to comply with all applicable standards, order or regulations issued pursuant to the Clean Air Act and the Federal Water Pollution Control Act (42 U.S.C., Section 7401 t 7671 and 33 U.S.C. Section 1318) violations should be reported to NGB and Environmental Protection Agency (EPA).

“El Contratista y la Agencia acuerdan cumplir con todas las normas, órdenes o regulaciones aplicables emitidas de conformidad con la Ley de Aire Limpio y la Ley Federal de Control de la Contaminación del Agua (42 USC, Sección 7401 t 7671 y 33 USC Sección 1318), las violaciones deben informarse a NGB y Agencia de Protección Ambiental (EPA).”

3. **Use of US Flags Carriers** The Contractor agrees to use US Flag Air Carriers for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118), and their intraoperative guideline by the Comptroller General of the United States.

“El Contratista acuerda utilizar US Flag Air Carriers para el transporte aéreo internacional de personas y propiedades en la medida en que dicho servicio esté disponible, de conformidad con la Ley de Prácticas Competitivas de la FERIA Internacional de Transporte Aéreo de 1974 (49 USC 40118), y su directriz intraoperatoria por El Contralor.”

4. **Debarment and Suspension: EXECUTIVE ORDERS 12549 and 12689 (APLICA A CONSTRUCCION DE \$100,000 o más)** The Contractor agrees to comply with 2CFR Part 180 by certifying that neither it, subcontractor nor its principals or its affiliates are excluded or disqualified from the Excluded executed Parties List System (EPLS) or the System for Awards Management (SAM), at the current OMB website. This certification is a material representation of fact upon which the agency relies in entering this contract. The Contractor will include a provision requiring such compliance in its lower tier transactions. This verification shall be documented on the Contract File and shall be subject to audit (31 U.S.C. 1352). The Contractor and or bidder will provide the required certification as part of the bid and the contract.

“El Contratista acuerda cumplir con 2CFR Parte 180 al certificar que ni él, el subcontratista ni sus directores o sus afiliados están excluidos o descalificados en el Sistema de Lista de Partes (EPLS) excluidas o el Sistema de Gestión de Premios (SAM), en el sitio web actual de OMB. Esta certificación es una representación material de hecho en la cual la agencia se basa para firmar este contrato. El contratista incluirá una disposición que requiera dicho cumplimiento en sus transacciones de nivel inferior. Esta verificación se documentará en el archivo del contrato y estará sujeta a auditoría (31 U.S.C.1352). El Contratista y/o el oferente proporcionarán la certificación requerida como parte de la oferta y el contrato.”

5. **Byrd Anti-lobbying amendment (APLICA A CONSTRUCCION- DESDE EL BID, REQUIERE CERTIFICACION; APLICA \$100,000 o más)**. The Contractor certifies that each tier to the tier above will not and has not used Federal appropriated funds to pay any organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, or an officer of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other awards covered by federal actions.

“El Contratista certifica que cada nivel del nivel anterior no utilizará ni ha utilizado los fondos federales apropiados para pagar a ninguna organización por influir o intentar influir un funcionario o empleado de cualquier agencia, un miembro del Congreso o un funcionario del Congreso, o un empleado de un miembro del Congreso en relación con la obtención de cualquier contrato federal, subvención o cualquier otro premio cubierto por acciones federales.”

6. **Buy American Act** The Contractor agrees to comply with the Buy American Act (41 U.S.C. 10a et seq.) giving preference to domestic end products and domestic construction material.

“El Contratista acepta cumplir con la Ley de Compras de Estados Unidos (41 U.S.C. 10a et seq.) Dando preferencia a los productos finales nacionales y al material de construcción nacional.”

7. **Central Contractor Registration** The parties agree to comply with the System for Award Management (SAM) and Data Universal Numbering System (DUNS) Requirements.

“Las partes acuerdan cumplir con el System for Award Management (SAM) y Data Universal Numbering Requirements (DUNS).”

8. **False or Fraudulent Statement of Claims** The Contractor acknowledges that 31 U.S.C. Chapter 38, applies to its actions pertaining to this contract. The Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to this contract. The Contractor agrees to include the above language in each subcontract under this contract, modified only to identify the subcontractor that will be subject to these provisions.

“El Contratista reconoce que 31 U.S.C., Capítulo 38 se aplica a sus acciones relacionadas con este contrato. El Contratista certifica o afirma la veracidad y exactitud de cualquier declaración que haya

hecho, haga, pueda hacer o haga que se haga en relación con este contrato. El Contratista acuerda incluir el lenguaje anterior en cada subcontrato bajo este contrato, modificado solo para identificar al subcontratista que estará sujeto a estas disposiciones.”

9. **Contract Work Hours and Safety Standards Act (APLICA A CONSTRUCCION DE \$100,000 o más)** The Contractor will comply with the contracts work hours and Safety Standard Act (40 USC Sections 3701-3708) as supplemented by the Department of Labor Regulations (29 CFR Part 5).

“El Contratista cumplirá con los contratos de horas de trabajo y la Ley de Normas de Seguridad (40 U.S.C. Secciones 3701-3708) según lo complementado por el Departamento de Regulaciones Laborales (29 CFR “Parte 5”).

10. **Davis-Bacon Act (APLICA A CONSTRUCCION DE \$2,000 o más)** The Contractor agrees to comply with the Davis-Bacon Act (40 U.S.C. & 3141-3148). That establishes the requirement for paying the local prevailing wages on public works projects for laborers and mechanics.

“El Contratista acepta cumplir con la Ley Davis-Bacon (40 U.S.C. y 3141-3148). Eso establece el requisito de pagar los salarios locales vigentes en proyectos de obras públicas para trabajadores y mecánicos.”

11. **Copeland Anti-kickback act 40 U.S.C. 3145. (APLICA A CONSTRUCCION DE \$2,000 o más y debe ir acompañada de la cláusula DAVIS BACON ACT)**. The Contractor or Sub-recipient will comply with the Copeland Anti-kickback Act (40 U.S.C. 3145). By this means the Contractor acknowledges and certify that will not induce any person employed in the construction, completion, or repair of any public work, to give up any part of the compensation to which he or she is otherwise entitled.

“El Contratista o el Sub-receptor cumplirán con la Ley contra el Soborno Copeland (40 U.S.C.3145). Por este medio, el Contratista reconoce y certifica que no inducirá a ninguna persona empleada en la construcción, finalización o reparación de ninguna obra pública a renunciar a ninguna parte de la compensación a la que tiene derecho de otra manera.”

12. **Energy Policy and Conservation Act** The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the State Energy Conservation Plan issued in compliance with the Federal Energy Policy and Conservation Act.

“El Contratista acepta cumplir con las normas y políticas obligatorias relacionadas con la eficiencia energética que figuran en el Plan Estatal de Conservación de Energía emitido de conformidad con la Ley Federal de Política y Conservación de Energía.”

13. **Seat Belt Use. Executive Order 13043.** In Accordance with the Executive Order No. 13043 the Contractor will enforce Seat Belt use policies and programs for its employees when operating agency cars, rented or personally owned vehicles.

“De acuerdo con la Orden Ejecutiva No. 13043, el Contratista hará cumplir el uso del cinturón de seguridad de las políticas y programas para sus empleados cuando operen automóviles de agencias, vehículos alquilados o de propiedad personal.”

14. **Compliance with Federal Law, Regulations and Executive Orders.** The Contractor will comply with all applicable federal laws, regulations and executive orders and National Guard policies, procedures and directives.

“El Contratista cumplirá con todas las leyes, regulaciones y órdenes ejecutivas federales aplicables y las políticas, procedimientos y directivas de la Guardia Nacional.”

15. **No Obligation by Federal Government:** The federal government is not a party to this contract and is not subject to any obligations or liabilities to the Agency, contractor, or any other party pertaining to any matter resulting from this contract.

“El gobierno federal no es parte de este contrato y no está sujeto a ninguna obligación o responsabilidades con la Agencia, el contratista o cualquier otra parte relacionada con cualquier asunto resultante de este contrato.”

16. Privacy Act

The Contractor agrees to:

- (1) Comply with the Privacy Act of 1974 (the Act) and the agency rules and regulations issued under the Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies-
 - a. The systems of records; and
 - b. The design, development, or operation work that the contractor is to perform.
 - c. Include the Privacy Act notification contained in this contract in every solicitation and resulting subcontract and in every subcontract awarded without a solicitation, when the work statement in the proposed subcontract requires the redesign, development, or operation of a system of records on individuals that is subject to the Act; and
- (2) Include this clause, including this paragraph,
- (3) in all subcontracts awarded under this contract which requires the design, development, or operation of such a system of records.

In the event of violations of the Act, a civil action may be brought against the agency involved when the violation concerns the design, development, or operation of a system of records on individuals to accomplish an agency function, and criminal penalties may be imposed upon the officers or employees of the agency when the violation concerns the operation of a system of records on individuals to accomplish an agency function. For purposes of the Act, when the contract is for the operation of a system of records on individuals to accomplish an agency function, the Contractor is an employee of the agency.

"Operation of a system of records," as used in this clause, means performance of any of the activities associated with maintaining the system of records, including the collection, use, and dissemination of records. "Record," as used in this clause, means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person's name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph.

"System of records on individuals," as used in this clause, means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

“El Contratista acepta:

- (1) *Cumplir con la Ley de Privacidad de 1974 (la Ley) y las reglas y regulaciones de la agencia emitidas bajo la Ley en el diseño, desarrollo u operación de cualquier sistema de registros de individuos para cumplir una función de la agencia cuando el contrato identifica específicamente:*
 - a. *Los sistemas de registros; y*
 - b. *El trabajo de diseño, desarrollo u operación que el contratista debe realizar;*
 - c. *Incluir la notificación de la Ley de Privacidad contenida en este contrato en cada solicitud y subcontracto resultante y en cada subcontracto otorgado sin una solicitud, cuando la declaración de trabajo en el subcontracto propuesto requiera el rediseño, desarrollo u operación de un sistema de registros de individuos que está sujeto a la Ley; e*
- (2) *Incluir esta cláusula, incluido este párrafo,*
- (3) *en todos los subcontratos adjudicados en virtud de este contrato que requiera el diseño, desarrollo u operación de dicho sistema de registros.*

“En caso de violaciones de la Ley, se puede entablar una acción civil contra la agencia involucrada cuando la violación se refiere al diseño, desarrollo u operación de un sistema de registros de individuos para cumplir una función de la agencia, y se pueden imponer sanciones penales a los oficiales o empleados de la agencia cuando la violación se refiere a la operación de un sistema de registros de individuos para cumplir una función de la agencia. Para propósitos de la Ley, cuando el contrato es

para la operación de un sistema de registros de individuos para cumplir una función de agencia, el Contratista se considera un empleado de la agencia."

"Operación de un sistema de registros", como se usa en esta cláusula, significa el desempeño de cualquiera de las actividades asociadas con el mantenimiento del sistema de registros, incluida la recopilación, uso y difusión de registros.

"Registro", como se usa en esta cláusula, significa cualquier elemento, recopilación o agrupación de información sobre un individuo que es mantenida por una agencia, que incluye, entre otros, educación, transacciones financieras, historial médico e historial criminal o laboral y que contiene el nombre de la persona, o el número de identificación, símbolo u otra identificación particular asignada a la persona, como una huella digital o una huella de voz o una fotografía.

"Sistema de registros de individuos", como se usa en esta cláusula, significa un grupo de registros bajo el control de cualquier agencia de la cual se recupera información por el nombre del individuo o por algún número de identificación, símbolo u otro identificador particular asignado al individuo."

- 17. Procurement of Recovered Materials: (APLICA A CONTRATOS DE \$10,000 o más)** The Contractor agrees to provide a preference for products and services that conserve natural resources that protect the environment and maximizes energy establishing an affirmative program for procurement of recovered materials identified as EPA guidelines.

"El Contratista acuerda proporcionar una preferencia por los productos y servicios que conservan los recursos naturales que protegen el medio ambiente y maximiza la energía estableciendo un programa afirmativo para la adquisición de materiales recuperados identificados como pautas de la EPA."

- 18. Equal Employment Opportunity (EEO)** The Contractor agrees to obey all laws and regulations regarding discrimination for reasons of race, color, gender, natural origin or social condition, sexual orientation, age, political or religious belief or any other discriminatory cause in the provision of services contained in this contract. It will also have the responsibility to avoid creating a hostile environment, free of all types of harassment, to include sexual harassment; having the responsibility of notifying the Executive Officer for State Affairs or the person designated by PRNG immediately of any situation that arises to this effect. Failure to comply in this regard will cause the contract to be terminated without further notice. According to Executive Order No. 11246, Amendment No. 11375, 41 CFR Part 60, Americans with Disabilities Act of 1990 (ADA) and 2 CFR Part 200.

"El Contratista acuerda obedecer todas las leyes y regulaciones con respecto a la discriminación por motivos de raza, color, género, origen natural o condición social, orientación sexual, edad, creencias políticas o religiosas o cualquier otra causa discriminatoria en la provisión de servicios contenidos en este contrato. También tendrá la responsabilidad de evitar crear un ambiente hostil, libre de todo tipo de acoso, para incluir el acoso sexual; tener la responsabilidad de notificar al Oficial Ejecutivo de Asuntos del Estado o la persona designada por PRNG de inmediato de cualquier situación que surja a este efecto. El incumplimiento a este respecto hará que el contrato se rescinda sin previo aviso. De acuerdo con la Orden Ejecutiva No. 11246, Enmienda No. 11375, 41 CFR Parte 60, estadounidenses con la Ley Americana de Discapacidades de 1990 (ADA) y 2 CFR Parte 200."

- 19. Termination for Cause and Convenience** Any of the parties may rescind the contract at any moment, through written notification to the other party, with fifteen (15) days in advance to the date in which the contractual resolution shall be effective. However, the requirement of prior notification will not apply when probable cause for arrest is determined against the Contractor, for any State or Federal crime, and for any of the grounds established in the contract. PRNG will be able to immediately terminate the contract in the event of negligence, abandonment of duties or non- fulfillment of any of the contractual obligations. Non-fulfillment, among other things, will include the Contractor not providing services required by PRNG after having requested them in writing or by any other approved means of communications.

NO services are to be paid for that are in violation to this clause, since it is understood that any official that request and/or accepts services from another part that is in violation to this disposition, is doing so

without any appropriate legal authority.

“Cualquiera de las partes puede rescindir el contrato en cualquier momento, mediante notificación escrita a la otra parte, con quince (15) días de anticipación a la fecha en que la resolución contractual será efectiva. Sin embargo, el requisito de notificación previa no se aplicará cuando se determine la causa probable del arresto contra el Contratista, por cualquier delito del Estado o Federal y por cualquiera de los motivos establecidos en el contrato. PRNG podrá rescindir inmediatamente el contrato en caso de negligencia, causa probable de arresto contra el Contratista, por cualquier delito del Estado Federal y por cualquiera de los abandonos de funciones o incumplimiento de cualquiera de las obligaciones contractuales. El incumplimiento, entre otras cosas, incluirá que el Contratista no brinde los servicios requeridos por PRNG después de haberlos solicitado por escrito o por cualquier otro medio de comunicación aprobado.

NO se pagarán servicios que infrinjan esta cláusula, ya que se entiende que cualquier funcionario que solicite y/ o acepte servicios de otra parte que infrinja esta disposición, lo hará sin ninguna autoridad legal adecuada.”

- 20. Contractual Legal Remedies Controversies and Pertinent Laws** This contract will be governed by the laws of the Government of Puerto Rico and the United States of America. Should any disposition, cause or part of this contract be contested for any reason before a Court of Law and declared unconstitutional or null, such determination will not affect, undermine or invalidate the remaining dispositions or clauses of this contract, rather, in its effect will limit only to the disposition declared unconstitutional or null. Both parties accept that the San Juan Superior Court (First Instance) will be the court with pertinent jurisdiction to elucidate any judicial action originating from this contract.

“Este contrato se registrará por las leyes del Gobierno de Puerto Rico y los Estados Unidos de América. Si alguna disposición, causa o parte de este contrato se impugna por algún motivo ante un Tribunal de Justicia y se declara inconstitucional o nula, dicha determinación no afectará, socavará ni invalidará las disposiciones o cláusulas restantes de este contrato, sino que, en su efecto, limitará solo a la disposición declarada inconstitucional o nula. Ambas partes aceptan que el Tribunal Superior de San Juan (Primera Instancia) será el tribunal con jurisdicción pertinente para dilucidar cualquier acción judicial que se origine en este contrato.”

- 21. Drug Free Work Place** The Contractor certifies that it will maintain a drug free working environment. It also certifies the publication and distribution of material related to the prohibition of controlled substances and the penalties that these are subject to and that prevention and detection of drug programs have been established. The Contractor will inform PRNG in case of a conviction for drugs in the workplace area and the disciplinary actions that will be taken against any employee convicted for criminal offenses related to the use and abuse of controlled substances according to the “Drug Free Workplace Act”.

“El Contratista certifica que mantendrá un ambiente de trabajo libre de drogas. También certifica la publicación y distribución de material relacionado con la prohibición de sustancias controladas y las sanciones a las que están sujetas y que se han establecido programas de prevención y detección de drogas. El Contratista informará a PRNG en caso de una condena por drogas en el área de trabajo y las medidas disciplinarias que se tomarán contra cualquier empleado condenado por delitos relacionados con el uso y abuso de sustancias controladas de acuerdo con la “Ley de Lugar de Trabajo Libre de Drogas”.

- 22. Prohibition on Contracting for Covered Telecommunications Equipment and Services** Section 889(b)(1) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (FY2019 NDAA) and 2 C.F.R. § 200.216, as implemented by FEMA Policy 405-143-1, Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services (Interim), prohibit the obligation or expending of federal award funds on certain telecommunication products or from certain entities for national security reasons. Effective August 13, 2020, FEMA recipients and subrecipients, as well as their contractors and subcontractors, may not obligate or expend any FEMA award funds to:

- (1) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- (2) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system; or
- (3) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

“La Sección 889(b)(1) de la Ley de Autorización de Defensa Nacional John S. McCain para el año fiscal 2019 (FY2019 NDAA) y 2 C.F.R. § 200.216, según lo implementado por la Política 405-143-1 de FEMA, Prohibición de la utilización de fondos adjudicados por FEMA para la compra equipos o servicios de telecomunicaciones cubiertos, prohíbe la inversión o el gasto de fondos de adjudicación federal en ciertos productos de telecomunicaciones o de ciertas entidades por razones de seguridad nacional. A partir del 13 de agosto de 2020, los recipientes y Subrecipientes de FEMA, así como sus contratistas y subcontratistas, no pueden invertir ni gastar fondos de adjudicación de FEMA para:

- (1) Adquirir u obtener cualquier equipo, sistema o servicio que utilice equipos o servicios de telecomunicaciones cubiertos como componente sustancial o esencial de cualquier sistema, o como tecnología crítica de cualquier sistema;*
- (2) Celebrar, extender o renovar un contrato para adquirir u obtener cualquier equipo, sistema o servicio que use equipos o servicios de telecomunicaciones cubiertos como un componente sustancial o esencial de cualquier sistema, o como tecnología crítica de cualquier sistema; o*
- (3) Celebrar, extender o renovar contratos con entidades que utilicen equipos o servicios de telecomunicaciones cubiertos como un componente sustancial o esencial de cualquier sistema, o como tecnología crítica como parte de cualquier sistema.”*

- 23. Domestic Preferences for Procurement** As appropriate, and to the extent consistent with law, the contractor should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.

For purposes of this clause:

Produced in the United States means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

Manufactured products mean items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.”

“Según aplique, y en la medida en que lo permita la ley, el contratista debe, en la mayor medida posible, dar preferencia a la compra, adquisición o uso de bienes, productos o materiales producidos en los Estados Unidos. Esto incluye, entre otros, hierro, aluminio, acero, cemento y otros productos manufacturados.

Para efectos de esta cláusula:

Producido en los Estados Unidos significa, para los productos de hierro y acero, que todos los procesos de fabricación, desde la etapa inicial de fusión hasta la aplicación de recubrimientos, ocurrieron en los Estados Unidos.

Los productos manufacturados significan artículos y materiales de construcción compuestos total o parcialmente de metales no ferrosos como el aluminio; plásticos y productos a base de polímeros como tubería de cloruro de polivinilo; agregados tales como concreto; vidrio, incluida la fibra óptica; y madera.”

Included by Legal Office Judge Advocate (JAG)

- 24. Police Record Check** The Contractor agrees to submit to a background check prior to providing services to PRNG. The background check will be completed by PRNG and includes a criminal record check, verification against the national sex offenders register and any other verification that deem necessary in relationship with the services to be provided by the Contractor. The background checks must show no

convictions or pending criminal charges that would render the Contractor to provide the services requested in the contract.

“El Contratista se compromete a someterse a una verificación de antecedentes antes de prestar servicios a PRNG. La verificación de antecedentes será realizada por la PRNG e incluye una verificación de antecedentes penales, verificación contra el registro nacional de ofensores sexuales y cualquier otra verificación que se considere necesaria con relación a los servicios que brindará el Contratista. Las verificaciones de antecedentes deben mostrar no condenas o cargos penales pendientes que harían que el Contratista no pueda brindar los servicios solicitados en el Contrato”.

25. Annual Threat Awareness and Reporting Program (TARP) Training All Contractor's Employee will complete an annual Threat Awareness and Reporting Program (TARP) training provided by a Counterintelligence Agent, IAW (DoDD 5240.06 Counterintelligence Awareness and Reporting). The Contractor shall submit the certificates of completion of the training for each employee or a memorandum for record to the COR or Contracting Officer (if a COR is not assigned), within five (5) calendar days after completion of the training.

"Todos los Empleados del Contratista completaran una capacitación anual del Programa de Informes y Concientización sobre Amenazas (TARP) brindada por un Agente de Contraineligencia, IAW "(DoDD 5240.06 Counterintelligence Awareness and Reporting). El Contratista deberá presentar los certificados de finalización de la capacitación para cada empleado o un memorando para su registro al COR o al Oficial de Contrataciones (si no se asigna un COR), dentro de los cinco (5) días calendario posteriores a la finalización de la capacitación.

We certify that we will comply with the clauses and conditions established by the aforementioned laws and regulations.

Certificamos que cumpliremos con las cláusulas y condiciones establecidas por las leyes y reglamentos antes mencionados.

Company/Compañía

Name/Nombre

Signature/Firma

Corporate Seal/Sello Corporativo

Position/Puesto que Ocupa

Date/Fecha

Attachment 4

HUD GENERAL PROVISIONS



HUD GENERAL PROVISIONS

In the case of Contracts to be funded in whole or in part by funding from the Housing and Urban Development (HUD) Community Development Block Grant (CDBG), the clauses listed below are required to ensure compliance with program requirements.

“En el caso de los Contratos que se financiarán en su totalidad o en parte con fondos de la Subvención en Bloque de Desarrollo Comunitario (CDBG, por sus siglas en inglés) del Departamento de la Vivienda y el Desarrollo Urbano (HUD, por sus siglas en inglés), las cláusulas que se enumeran a continuación son necesarias para garantizar el cumplimiento de los requisitos del programa.”

HUD General Provisions

The following terms and conditions apply to any contract for which any portion of the funding is derived from a grant made by the United States Department of Housing and Urban Development (“HUD”). In addition, the Agency and the Contractor shall comply with the Federal Labor Standards Provisions set forth in Form HUD4010, available at <http://www.hud.gov/offices/adm/hudclips/forms/files/4010.pdf>.

These general provisions may be updated from time to time. It is the sole responsibility of the Agency and the Contractor to be aware of any changes hereto, to amend and implement such changes and to ensure subcontracts terms and conditions are modified as necessary, if any.

“Los siguientes términos y condiciones se aplican a cualquier contrato para el cual una parte de los fondos se derive de una subvención otorgada por el Departamento de Vivienda y Desarrollo Urbano de los Estados Unidos (“HUD”). Además, la Agencia y el Contratista deberán cumplir con las Disposiciones de las Normas Laborales Federales establecidas en el Formulario HUD4010, disponible en <http://www.hud.gov/offices/adm/hudclips/forms/files/4010.pdf>.

Estas disposiciones generales pueden ser actualizadas periódicamente. Es responsabilidad exclusiva de la Agencia y el Contratista estar al tanto de cualquier cambio al presente, modificar e implementar dichos cambios y garantizar que los términos y condiciones de los subcontratos se modifiquen según sea necesario, si corresponde.”

General Provisions:

- Provisions Required by Law Deemed inserted** Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion or correction.

“Todas y cada una de las disposiciones de la ley y las cláusulas requeridas por la ley para ser insertadas en este Contrato se considerarán insertadas en el presente y el Contrato se leerá y ejecutará como si estuviera incluido en el presente, y si por error o de otro modo, dicha disposición no se cumple, insertado, o no se inserta correctamente, entonces, a solicitud de cualquiera de las partes,

el Contrato se modificará físicamente de inmediato para realizar dicha inserción o corrección.”

2. **Statutory and Regulatory Compliance** The Agency and the Contractor shall comply with all laws and regulations applicable to the Community Development Block Grant-Disaster Recovery funds appropriated by the Supplemental Appropriations for Disaster Relief Requirements, 2017 (Pub. L. 115-56), approved September 8, 2017 (Appropriations Act), as amended, including but not limited to the applicable Office of Management and Budget Circulars, which may impact the administration of funds and/or set forth certain cost principles, including if certain expenses are allowed.

“La Agencia y el Contratista deberán cumplir con todas las leyes y reglamentaciones aplicables a los fondos de Subvención en Bloque para el Desarrollo Comunitario-Recuperación de Desastres asignados por las Asignaciones Suplementarias para los Requisitos de Manejo de Desastres, 2017 (Pub. L. 115-56), aprobado el 8 de septiembre de 2017 (“Appropriations Act”), según enmendada, incluidas, entre otras, las circulares de la Oficina de Gerencia y Presupuesto aplicables, que pueden afectar la administración de fondos y/o establecer ciertos principios de costos, incluso si se permiten ciertos gastos.”

3. **Breach of Agency Agreement Terms**

The Agency and the Contractor reserve the right to all administrative, contractual, or legal remedies, including but not limited to suspension or termination of this Contract, in instances where the Agency or any of its subcontractors violate or breach any Contract term. If the Agency or any of its subcontractors violate or breach any Contract term, they shall be subject to such sanctions and penalties as may be appropriate. The duties and obligations imposed by the Contract documents, and the rights and remedies available thereunder, shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

“La Agencia y el Contratista se reservan el derecho a todos los recursos administrativos, contractuales o legales, incluidos, entre otros, la suspensión o terminación de este Contrato, en los casos en que la Agencia o cualquiera de sus subcontratistas viole o incumpla cualquier término del Contrato. Si la Agencia o cualquiera de sus subcontratistas violan o incumplen cualquier término del Contrato, estarán sujetos a las sanciones y penalidades que correspondan. Los deberes y obligaciones impuestos por los documentos del Contrato, y los derechos y recursos disponibles en virtud de los mismos, se sumarán y no limitarán los deberes, obligaciones, derechos y recursos impuestos o disponibles por ley.”

4. **Reporting Requirements**

The Agency shall complete and submit all reports, in such form and according to such schedule, as may be required by the PRDOH and/or the Government of Puerto Rico. The Agency shall cooperate with all the PRDOH and/or the Government of Puerto Rico efforts to comply with HUD requirements and regulations pertaining to reporting, including but not limited to 2 C.F.R. § 200.328 and 24 C.F.R. § 570.507, when applicable.

“La Agencia completará y someterá todos los informes, en la forma y según el cronograma, que sean requeridos por Vivienda y/o el Gobierno de Puerto Rico. La Agencia cooperará con todos los esfuerzos de Vivienda y/o el Gobierno de Puerto Rico para cumplir con los requisitos y reglamentos de HUD relacionados con la presentación de informes, incluidos, entre otros, 2 C.F.R. § 200.328 y 24 C.F.R. § 570.507, cuando corresponda.”

5. **Access To Records**

The Government of Puerto Rico, the PRDOH, HUD, the Comptroller General of the United States, or any of their duly authorized representatives, shall have at any time and from time to time during normal business hours, access to any work product, books, documents, papers, and records of the which are related to this Contract, for the purpose of inspection, audits, examinations, and making excerpts, copies and transcriptions.

“El Gobierno de Puerto Rico, Vivienda, HUD, el Contralor General de los Estados Unidos, o cualquiera

de sus representantes debidamente autorizados, tendrán en cualquier momento y de vez en cuando durante el horario normal de trabajo, acceso a cualquier producto de trabajo, libros, documentos, papeles y registros de los que se relacionen con este Contrato, para efectos de inspección, auditoría, examen y realización de extractos, copias y transcripciones.”

6. Maintenance/Retention of Records

The Agency and the Contractor shall retain all official records on programs and individual activities shall be retained for the greater of five (5) years, starting from the closeout of the grant between PRDOH and HUD, or the end of the affordability period for each housing activity, whichever is longer. If any other laws and regulations as described in 24 C.F.R. § 570.490 applies to a project, the record retention period may be extended. All records involved in litigation, claims, audits, negotiations, or other actions, which have started before the expiration date of their retention, will be kept until completion of the action and resolution of all issues or the end of the regular five (5) year period, whichever is longer. (See 2 C.F.R. § 200.333 and 24 C.F.R. § 570.490(d).)

La Agencia y el Contratista conservarán todos los registros oficiales de los programas y las actividades individuales durante cinco (5) años, el término que sea mayor, a partir del cierre de la subvención entre Vivienda y HUD, o el final del período de asequibilidad para cada vivienda. actividad, lo que sea más largo. Si cualquier otra ley y reglamento como se describe en 24 C.F.R. § 570.490 se aplica a un proyecto, el período de retención de registros puede extenderse. Todos los registros involucrados en litigios, reclamos, auditorías, negociaciones u otras acciones, que hayan comenzado antes de la fecha de vencimiento de su retención, se conservarán hasta la finalización de la acción y resolución de todos los asuntos o el final de los cinco (5) días regulares. periodo de un año, el que sea mayor. (Ver 2 C.F.R. § 200.333 y 24 C.F.R. § 570.490(d).)

7. Small And Minority Firms. Women’s Business Enterprises. And Labor Surplus Area Firms

The Agency and the Contractor will take necessary affirmative steps to assure that minority firms, women’s business enterprises, and labor surplus area firms are used in subcontracting when possible. Steps include, but are not limited to:

- a. Placing qualified small and minority businesses and women’s business enterprises on solicitation lists;
- b. Assuring that small and minority businesses, and women’s business enterprises are solicited whenever they are potential sources;
- c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women’s business enterprises;
- d. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women’s business enterprises; and
- e. Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce.

Additionally, for contracts of \$10,000 or more, the Agency and the Contractor shall file Form HUD 2516 (Contract and Subcontract Activity) with the PRDOH on a quarterly basis.

“La Agencia y el Contratista tomarán las medidas afirmativas necesarias para garantizar que las empresas minoritarias, las empresas comerciales de mujeres y las empresas del área de mano de obra excedente se utilicen en la subcontratación cuando sea posible. Los pasos incluyen, pero no se limitan a:

- a. *Colocar empresas calificadas de minorías y pequeñas empresas y empresas comerciales de mujeres en listas de solicitud;*
- b. *Asegurar que las empresas pequeñas y minoritarias y las empresas comerciales de mujeres sean solicitadas siempre que sean fuentes potenciales;*
- c. *Dividir los requisitos totales, cuando sea económicamente factible, en tareas o cantidades más pequeñas para permitir la máxima participación de empresas pequeñas y minoritarias, y empresas comerciales de mujeres;*

- d. *Establecer cronogramas de entrega, cuando el requisito lo permita, que fomenten la participación de empresas pequeñas y minoritarias, y empresas comerciales de mujeres; y*
- e. *Utilizar los servicios y la asistencia de la Administración de Pequeñas Empresas y la Agencia de Desarrollo de Empresas Minoritarias del Departamento de Comercio.*

Además, para contratos de \$10,000 o más, la Agencia y el Contratista deberán presentar el Formulario HUD 2516 (Actividad de Contratos y Subcontratos) con Vivienda trimestralmente.”

8. Rights To Inventions Made Under A Contract Or Agreement

Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements”, and any implementing regulations issued by HUD.

“Los contratos o acuerdos para la realización de trabajos experimentales, de desarrollo o de investigación deberán estipular los derechos del gobierno federal y del destinatario sobre cualquier invención resultante de conformidad con 37 CFR Parte 401, “Derechos a las invenciones realizadas por organizaciones sin fines de lucro y pequeñas empresas comerciales Bajo Subsidios del Gobierno, Contratos y Acuerdos Cooperativos”, y cualquier reglamento de implementación emitido por HUD.”

9. Title VI of the Civil Rights Act Of 1964

The Agency and the Contractor will comply with the provisions of Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin in any program or activity that receives Federal funds or other Federal financial assistance. Programs that receive Federal funds cannot distinguish among individuals on the basis of race, color or national origin, either directly or indirectly, in the types, quantity, quality or timeliness of program services, aids or benefits that they provide or the manner in which they provide them. This prohibition applies to intentional discrimination as well as to procedures, criteria or methods of administration that appear neutral but have a discriminatory effect on individuals because of their race, color, or national origin. Policies and practices that have such an effect must be eliminated unless a recipient can show that they were necessary to achieve a legitimate nondiscriminatory objective.

“La Agencia y el Contratista cumplirán con las disposiciones del Título VI de la Ley de Derechos Civiles de 1964, que prohíbe la discriminación por motivos de raza, color u origen nacional en cualquier programa o actividad que reciba fondos federales u otra asistencia financiera federal. Los programas que reciben fondos federales no pueden distinguir entre las personas por motivos de raza, color u origen nacional, ya sea directa o indirectamente, en los tipos, la cantidad, la calidad o la puntualidad de los servicios del programa, las ayudas o los beneficios que brindan o la forma en que proveerles. Esta prohibición se aplica a la discriminación intencional, así como a los procedimientos, criterios o métodos de administración que parecen neutrales pero tienen un efecto discriminatorio sobre las personas debido a su raza, color u origen nacional. Las políticas y prácticas que tengan tal efecto deben eliminarse a menos que un destinatario pueda demostrar que fueron necesarias para lograr un objetivo legítimo no discriminatorio.”

10. Section 109 of the Housing And Community Development Act Of 1974

The Agency and the Contractor shall comply with the provisions of Section 109 of the Housing and Community Development Act of 1974. No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title. Section 109 further provides that discrimination on the basis of age under the Age Discrimination Act of 1975 or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, as amended, is prohibited.

“La Agencia y el Contratista deberán cumplir con las disposiciones de la Sección 109 de la Ley de Vivienda y Desarrollo Comunitario de 1974. Ninguna persona en los Estados Unidos por motivos de

raza, color, origen nacional o sexo será excluida de participar en, ser negado los beneficios de, o ser objeto de discriminación en virtud de cualquier programa o actividad financiada en su totalidad o en parte con los fondos disponibles en virtud de este título. El artículo 109 dispone además que está prohibida la discriminación basada en la edad en virtud de la Ley de discriminación por edad de 1975 o con respecto a una persona discapacitada calificada según lo dispuesto en el artículo 504 de la Ley de rehabilitación de 1973, enmendada.”

11. Section 504 of the Rehabilitation Act Of 1973

The Agency and the Contractor shall comply with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794), as amended, and any applicable regulations. The Agency and the Contractor agrees that no qualified individual with a disability shall, solely on the basis of their disability, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity that receives Federal financial assistance from HUD.

“La Agencia y el Contratista deberán cumplir con la Sección 504 de la Ley de Rehabilitación de 1973 (29 U.S.C. § 794), según enmendada, y cualquier reglamento aplicable. La Agencia y el Contratista acuerdan que ninguna persona calificada con una discapacidad será excluida de la participación, se le negarán los beneficios o de otra manera estará sujeta a discriminación bajo cualquier programa o actividad que reciba fondos federales, únicamente en base a su discapacidad. asistencia de HUD.”

12. Age Discrimination Act Of 1975

The Agency and the Contractor shall comply with the Age Discrimination Act of 1975 (42 U.S.C. § 6101 et seq.), as amended, and any applicable regulations. No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to, discrimination under, any program or activity receiving Federal financial assistance.

“La Agencia y el Contratista deberán cumplir con la Ley de Discriminación por Edad de 1975 (42 U.S.C. § 6101 et seq.), según enmendada, y cualquier reglamento aplicable. Ninguna persona en los Estados Unidos, por motivos de edad, será excluida de la participación, se le negarán los beneficios o será objeto de discriminación en virtud de cualquier programa o actividad que reciba asistencia financiera federal.”

13. Debarment, Suspension, And Ineligibility

The Agency and the Contractor represents and warrants that it and its subcontractors are not debarred or suspended or otherwise excluded from or ineligible for participation in Federal assistance programs subject to 2 C.F.R. Part 2424.

“La Agencia y el Contratista declaran y garantizan que ni ella ni sus subcontratistas están inhabilitados, suspendidos o excluidos o inelegibles para participar en programas de asistencia federal sujetos a 2 C.F.R. Parte 2424.”

14. Conflicts Of Interest

The Agency and the Contractor shall notify the PRDOH as soon as possible if this Contract or any aspect related to the anticipated work under this Contract raises an actual or potential conflict of interest (as defined 2 C.F.R. § 200.318(c), if applicable). The Agency and the Contractor shall explain the actual or potential conflict in writing in sufficient detail so that the PRDOH is able to assess such actual or potential conflict. The Agency and the Contractor shall provide the PRDOH any additional information necessary to fully assess and address such actual or potential conflict of interest. The Agency and the Contractor shall accept any reasonable conflict mitigation strategy employed by the PRDOH, including but not limited to the use of an independent subcontractor(s) to perform the portion of work that gives rise to the actual or potential conflict.

La Agencia y el Contratista notificarán a Vivienda lo antes posible si este Contrato o cualquier aspecto relacionado con el trabajo anticipado bajo este Contrato plantea un conflicto de interés real o potencial (como se define en 2 C.F.R. § 200.318(c), si corresponde). La Agencia y el Contratista deberán explicar el conflicto real o potencial por escrito con suficiente detalle para que Vivienda pueda evaluar

dicho conflicto real o potencial. La Agencia y el Contratista proporcionarán a VIVIENDA cualquier información adicional necesaria para evaluar completamente y abordar dicho conflicto de interés real o potencial. La Agencia y el Contratista aceptarán cualquier estrategia razonable de mitigación de conflictos empleada por Vivienda, que incluye, entre otros, el uso de subcontratistas independientes para realizar la parte del trabajo que da lugar al conflicto real o potencial.

15. Subcontracting

When subcontracting, the Agency and the Contractor shall solicit for and contract with such subcontractors in a manner providing for fair competition. Some of the situations considered to be restrictive of competition include, but are not limited to:

- a. Placing unreasonable requirements on firms in order for them to qualify to do business;
- b. Requiring unnecessary experience and excessive bonding;
- c. Noncompetitive pricing practices between firms or between affiliated Companies;
- d. Noncompetitive awards to consultants that are on retainer contracts,
- e. Organizational conflicts of interest;
- f. Specifying only a brand name product instead of allowing an equal product to be offered and describing the performance of other relevant requirements of the procurement; and
- g. Any arbitrary action in the procurement process.

The Agency and the Contractor represents to the PRDOH that all work shall be performed by personnel experienced in the appropriate and applicable profession and areas of expertise, taking into account the nature of the work to be performed under this Contract.

The Agency and the Contractor will include these HUD General Provisions in every subcontract issued by it, so that such provisions will be binding upon each of its subcontractors as well as the requirement to flow down such terms to all lower-tiered subcontractors.

“Al subcontratar, la Agencia y el Contratista solicitarán y contratarán a dichos subcontratistas de manera que se establezca una competencia justa. Algunas de las situaciones consideradas restrictivas de la competencia incluyen, pero no se limitan a:

- a. Imponer requisitos irrazonables a las empresas para que califiquen para hacer negocios;*
- b. Requerir experiencia innecesaria y vinculación excesiva;*
- c. Prácticas de fijación de precios no competitivas entre firmas o entre Compañías afiliadas;*
- d. Premios no competitivos a consultores que tienen contratos de retención,*
- e. Conflictos de intereses organizacionales;*
- f. Especificar solo un producto de marca en lugar de permitir que se ofrezca un producto igual y describir el desempeño de otros requisitos relevantes de la contratación; y*
- g. Cualquier acción arbitraria en el proceso de contratación.*

La Agencia y el Contratista declaran a Vivienda que todo el trabajo será realizado por personal con experiencia en la profesión y áreas de especialización apropiadas y aplicables, teniendo en cuenta la naturaleza del trabajo que se realizará en virtud de este Contrato.

La Agencia y el Contratista incluirán estas Disposiciones generales de HUD en cada subcontrato que emita, de modo que dichas disposiciones sean vinculantes para cada uno de sus subcontratistas, así como el requisito de extender dichos términos a todos los subcontratistas de nivel inferior.”

16. Assignability

The Agency and the Contractor shall not assign any interest in this Agreement and shall not transfer any interest in the same (whether by assignment or novation) without prior written approval of the PRDOH.

“La Agencia y el Contratista no podrán ceder ningún interés en este Acuerdo y no transferirán ningún interés en el mismo (ya sea por cesión o novación) sin la aprobación previa por escrito de Vivienda.”

17. Indemnification

The Agency and the Contractor shall indemnify, defend, and hold harmless the Government of Puerto Rico and PRDOH, its agents and employees, from and against any and all claims, actions, suits, charges, and judgments arising from or related to the negligence or willful misconduct of the Agency and the Contractor in the performance of the services called for in this Contract.

“La Agencia y el Contratista indemnizarán, defenderán y eximirán de responsabilidad al Gobierno de Puerto Rico y Vivienda, sus agentes y empleados, de y contra cualquier y todo reclamo, acción, demanda, cargo y juicio que surja de o esté relacionado con la negligencia o dolo de la Agencia y el Contratista en la prestación de los servicios previstos en el presente Contrato.”

18. Copeland “Anti-Kickback” Act

(Applicable to all construction or repair contracts)

Salaries of personnel performing work under this Contract shall be paid unconditionally and not less often than once a month without payroll deduction or rebate on any account except only such payroll deductions as are mandatory by law or permitted by the applicable regulations issued by the Secretary of Labor pursuant to the Copeland “Anti-Kickback Act” of June 13, 1934 (48 Stat. 948; 62 Stat. 740; 63 Stat. 108; Title 18 U.S.C. § 874; and Title 40 U.S.C. § 276c). The AGENCY shall comply with all applicable “Anti- Kickback” regulations and shall insert appropriate provisions in all subcontracts covering work under this Agreement to ensure compliance by subcontractors with such regulations and shall be responsible for the submission of affidavits required of subcontractors thereunder except as the Secretary of Labor may specifically provide for variations of or exemptions from the requirements thereof.

“(Aplicable a todos los contratos de construcción o reparación)

Los salarios del personal que realice trabajos en virtud de este Contrato se pagarán incondicionalmente y con una frecuencia no menor a una vez al mes sin deducción de nómina o reembolso en ninguna cuenta, excepto solo las deducciones de nómina que sean obligatorias por ley o permitidas por las reglamentaciones aplicables emitidas por el secretario del Trabajo. de conformidad con la “Ley Antisoborno” de Copeland del 13 de junio de 1934 (48 Stat. 948; 62 Stat. 740; 63 Stat. 108; Título 18 U.S.C. § 874; y Título 40 U.S.C. § 276c). La AGENCIA cumplirá con todos los reglamentos “Anti-Sobornos” aplicables e insertará las disposiciones apropiadas en todos los subcontratos que cubran el trabajo bajo este Acuerdo para garantizar el cumplimiento de dichos reglamentos por parte de los subcontratistas, y será responsable de la presentación de las declaraciones juradas requeridas de los subcontratistas en virtud del mismo, excepto como el Secretario del Trabajo podrá disponer específicamente variaciones o exenciones de los requisitos del mismo.”

19. Contract Work Hours and Safety Standards Act

(Applicable to construction contracts exceeding \$2,000 and contracts exceeding \$2,500 that involve the employment of mechanics or laborers.)

The Agency and the Contractor shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-330) as supplemented by Department of Labor regulations (29 C.F.R. Part 5). All laborers and mechanics employed by Agency, Contractor or subcontractors shall receive overtime compensation in accordance with and subject to the provisions of the Contract Work Hours and Safety Standards Act, and the Agency, Contractors and subcontractors shall comply with all regulations issued pursuant to that act and with other applicable Federal laws and regulations pertaining to labor standards.

“(Aplicable a contratos de construcción que excedan \$2,000 y contratos que excedan \$2,500 que involucren el empleo de mecánicos o trabajadores).

La Agencia y el Contratista deberán cumplir con las Secciones 103 y 107 de la Ley de Estándares de Seguridad y Horas de Trabajo por Contrato (40 U.S.C. §§ 327-330) complementado por las regulaciones del Departamento de Trabajo (29 C.F.R. Parte 5). Todos los trabajadores y mecánicos

empleados por la Agencia, el Contratista o los subcontratistas recibirán una compensación por horas extra de acuerdo con las disposiciones de la Ley de Normas de Seguridad y Horas de Trabajo por Contrato, y la Agencia, los Contratistas y los subcontratistas deberán cumplir con todos los reglamentos emitidos de conformidad con esa ley. y con otras leyes y reglamentos federales aplicables relacionados con las normas laborales.”

20. Davis-Bacon Act

(Applicable to construction contracts exceeding \$2,000 when required by Federal program legislation.) The Agency and the Contractor shall comply with the Davis Bacon Act (40 U.S.C. §§ 276a to 276a-7) as supplemented by Department of Labor regulations (29 C.F.R. Part 5). All laborers and mechanics employed by Agency, Contractor or subcontractor, including employees of other governments, on construction work assisted under this Contract, and subject to the provisions of the federal acts and regulations listed in this paragraph, shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act. On a semi-annual basis, the Agency and the Contractor shall submit Form HUD 4710 (Semi-Annual labor Standards Enforcement Report) to PRDOH.

“(Aplicable a contratos de construcción que excedan los \$2,000 cuando lo exija la legislación del programa federal).

La Agencia y el Contratista deberán cumplir con la Ley Davis Bacon (40 U.S.C. §§ 276a a 276a-7) complementada por las reglamentaciones del Departamento de Trabajo (29 C.F.R. Parte 5). Todos los trabajadores y mecánicos empleados por la Agencia, el Contratista o el subcontratista, incluidos los empleados de otros gobiernos, en trabajos de construcción asistidos en virtud de este Contrato, y sujetos a las disposiciones de las leyes y reglamentos federales enumerados en este párrafo, recibirán salarios a tasas no inferiores a que las que prevalecen en construcciones similares en la localidad según lo determine el secretario de Trabajo de acuerdo con la Ley Davis-Bacon. Semestralmente, la Agencia y el Contratista deberán presentar el Formulario HUD 4710 (Informe Semestral de Cumplimiento de Normas Laborales) a Vivienda.”

21. Termination for Cause

(Applicable to contracts exceeding \$10,000)

if, through any cause, the Agency and the Contractor shall fail to fulfill in a timely and proper manner his or her obligations under this contract, or if the Agency and the Contractor shall violate any of the covenants, agreements, or stipulations of this contract, the Agency and the Contractor shall thereupon have the right to terminate this contract by giving written notice to the Agency and the Contractor of such termination and specifying the effective date thereof, at least five (5) days before the effective date of such termination. in such event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports prepared by the Agency and the Contractor under this agreement shall, at the option of the Agency and the Contractor, become the Agency and the Contractor property and the Agency and the Contractor shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder. Notwithstanding the above, the Agency and the Contractor shall not be relieved of liability to the Government of Puerto Rico and PRDOH for damages sustained by the Government of Puerto Rico and/or PRDOH by virtue of any breach of the Agreement by the Agency and the Contractor, and the Government of Puerto Rico and/or PRDOH may withhold any payments to the Agency and the Contractor for the purpose of set-off until such time as the exact amount of damages due to the Government of Puerto Rico and/or PRDOH from the Agency and the Contractor is determined.

“(Aplicable a contratos superiores a \$10,000)

si, por cualquier causa, la Agencia y el Contratista incumplen en tiempo y forma sus obligaciones bajo este contrato, o si la Agencia y el Contratista violan cualquiera de los convenios, acuerdos o estipulaciones de este contrato, la Agencia y el Contratista tendrán derecho a rescindir este contrato mediante notificación por escrito a la Agencia y al Contratista de dicha rescisión y especificando la fecha de vigencia de la misma, al menos cinco (5) días antes de la fecha de vigencia de dicha rescisión. en tal caso, todos los documentos, datos, estudios, encuestas, dibujos, mapas, modelos, fotografías e informes terminados o no terminados preparados por la Agencia y el Contratista en

virtud de este acuerdo, a opción de la Agencia y el Contratista, se convertirán en la propiedad de la Agencia y el Contratista y la Agencia y el Contratista tendrán derecho a recibir una compensación justa y equitativa por cualquier trabajo completado satisfactoriamente en virtud del presente. No obstante lo anterior, la Agencia y el Contratista no quedarán relevados de responsabilidad ante el Gobierno de Puerto Rico y Vivienda por daños sufridos por el Gobierno de Puerto Rico y/o Vivienda en virtud de cualquier incumplimiento del Acuerdo por parte de la Agencia y el Contratista. , y el Gobierno de Puerto Rico y/o VIVIENDA podrán retener cualquier pago a la Agencia y al Contratista con el propósito de compensar hasta el momento en que la cantidad exacta de daños adeudados al Gobierno de Puerto Rico y/o VIVIENDA del Se determina la Agencia y el Contratista."

22. Termination For Convenience

(Applicable to contracts exceeding \$10,000)

The Agency and the Contractor may terminate this contract at any time by giving at least ten (10) days' notice in writing to the Agency and the Contractor. if the contract is terminated by the Agency and the Contractor as provided herein, the Agency and the Contractor will be paid for the time provided and expenses incurred up to the termination date.

"(Aplicable a contratos superiores a \$10,000)

La Agencia y el Contratista podrán rescindir este contrato en cualquier momento mediante notificación por escrito a la Agencia y al Contratista con al menos diez (10) días de anticipación. si el contrato es rescindido por la Agencia y el Contratista según lo aquí dispuesto, se pagará a la Agencia y al Contratista por el tiempo prestado y los gastos incurridos hasta la fecha de rescisión."

23. Section 503 of the Rehabilitation Act Of 1973

(Applicable to contracts exceeding \$10,000)

The Agency and the Contractor shall comply with Section 503 of the Rehabilitation Act of 1973 (29 U.S.C. § 793), as amended, and any applicable regulations.

Equal Opportunity for Workers with Disabilities:

a. The Agency and The Contractor will not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The Agency and The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified individuals with disabilities without discrimination based on their physical or mental disability in all employment practices, including the following:

- Recruitment, advertising, and job application procedures;
- Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff and rehiring;
- Rates of pay or any other form of compensation and changes in compensation;
- Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;
- Leaves of absence, sick leave, or any other leave;
- Fringe benefits available by virtue of employment, whether or not administered by the Agency and the Contractor;
- Selection and financial support for training, including apprenticeship, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;
- Activities sponsored by the Agency and the Contractor including social or recreational programs; and
- Any other term, condition, or privilege of employment.

b. The Agency and the Contractor agree to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

- c. In the event of the Agency and the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.
- d. The Agency and the Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, provided by or through the contracting officer. Such notices shall state the rights of applicants and employees as well as the Agency and the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants with disabilities. The Agency and the Contractor must ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Agency and the Contractor may have the notice read to a visually disabled individual or may lower the posted notice so that it might be read by a person in a wheelchair).
- e. The Agency and the Contractor will notify each labor organization or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the AGENCY AND THE CONTRACTOR is bound by the terms of Section 503 of the Rehabilitation Act of 1973, as amended, and is committed to take affirmative action to employ and advance in employment individuals with physical or mental disabilities.
- f. The Agency and the Contractor will include the provisions of this clause in every subcontract or purchase order in excess of \$10,000, unless exempted by the rules, regulations, or orders of the Secretary issued pursuant to Section 503 of the Act, as amended, so that such provisions will be binding upon each subcontractor or vendor. The Agency and the Contractor will take such action with respect to any subcontract or purchase order as the Deputy Assistant Secretary for Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

“(Aplicable a contratos superiores a \$10,000)

La Agencia y el Contratista deberán cumplir con la Sección 503 de la Ley de Rehabilitación de 1973 (29 U.S.C. § 793), según enmendada, y cualquier reglamento aplicable.

Igualdad de Oportunidades para Trabajadores con Discapacidades:

- a. *La Agencia y el Contratista no discriminarán a ningún empleado o solicitante de empleo debido a una discapacidad física o mental con respecto a cualquier puesto para el cual el empleado o solicitante de empleo esté calificado. La Agencia y el Contratista acuerdan tomar medidas afirmativas para emplear, avanzar en el empleo y tratar a personas calificadas con discapacidades sin discriminación en función de su discapacidad física o mental en todas las prácticas laborales, incluidas las siguientes:*
 - *Procedimientos de contratación, publicidad y solicitud de empleo;*
 - *Contratación, ascenso, promoción, adjudicación de la tenencia, descenso de categoría, transferencia, cesantía, terminación, derecho de regreso de la cesantía y recontractación;*
 - *Tasas de pago o cualquier otra forma de compensación y cambios en la compensación;*
 - *Asignaciones de puestos, clasificaciones de puestos, estructuras organizativas, descripciones de puestos, líneas de progresión y listas de antigüedad;*
 - *Licencias de ausencia, licencia por enfermedad o cualquier otra licencia;*
 - *Beneficios complementarios disponibles en virtud del empleo, sean o no administrados por la Agencia y el Contratista;*
 - *Selección y apoyo financiero para la capacitación, incluido el aprendizaje, reuniones profesionales, conferencias y otras actividades relacionadas, y selección para licencias para continuar con la capacitación;*
 - *Actividades patrocinadas por la Agencia y el Contratista incluyendo sociales o recreativas*
 - *programas; y*

- *Cualquier otro término, condición o privilegio de empleo.*
- b. *La Agencia y el Contratista acuerdan cumplir con las normas, reglamentos y órdenes pertinentes del secretario del Trabajo emitidas de conformidad con la Ley.*
- c. *En caso de incumplimiento por parte de la Agencia y el Contratista de los requisitos de esta cláusula, se podrán tomar acciones por incumplimiento de conformidad con las normas, reglamentos y órdenes pertinentes del secretario del Trabajo emitidas de conformidad con la Ley.*
- d. *La Agencia y el Contratista acuerdan publicar en lugares visibles, disponibles para los empleados y solicitantes de empleo, avisos en la forma que prescriba el Subsecretario Adjunto de Programas de Cumplimiento de Contratos Federales, provistos por o a través del oficial de contratación. Dichos avisos deberán indicar los derechos de los solicitantes y empleados, así como la obligación de la Agencia y el Contratista conforme a la ley de tomar medidas afirmativas para emplear y promover en el empleo a empleados calificados y solicitantes con discapacidades. La Agencia y el Contratista deben asegurarse de que los solicitantes y empleados con discapacidades estén informados del contenido del aviso (p. ej., la Agencia y el Contratista pueden pedir que se lea el aviso a una persona con discapacidad visual o pueden bajar el aviso publicado para que pueda ser leído por una persona en silla de ruedas).*
- e. *La Agencia y el Contratista notificarán a cada organización laboral o representante de los trabajadores con los que tenga un acuerdo de negociación colectiva u otro acuerdo contractual, que la AGENCIA Y EL CONTRATISTA están sujetos a los términos de la Sección 503 de la Ley de Rehabilitación de 1973, según enmendada, y se compromete a tomar medidas afirmativas para emplear y promover en el empleo a las personas con discapacidades físicas o mentales.*
- f. *La Agencia y el Contratista incluirán las disposiciones de esta cláusula en todo subcontrato u orden de compra en exceso de \$10,000, a menos que estén exentos por las reglas, reglamentos u órdenes del secretario emitidas conforme a la Sección 503 de la Ley, según enmendada, para que dichas disposiciones serán vinculantes para cada subcontratista o proveedor. La Agencia y el Contratista tomarán las medidas con respecto a cualquier subcontrato u orden de compra que el Subsecretario Adjunto de Programas de Cumplimiento de Contratos Federales pueda ordenar para hacer cumplir dichas disposiciones, incluida la acción por incumplimiento.*

24. Equal Employment Opportunity

(Applicable to construction contracts and subcontracts exceeding \$10,000)

The Agency and the Contractor shall comply with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60). During the performance of this Agreement, the Agency and the Contractor agrees as follows:

- a. The Agency and the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Agency and the Contractor shall take affirmative action to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- b. The Agency and the Contractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by Contracting Officer setting forth the provisions of this non-discrimination clause. the Agency and the Contractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- c. The Agency and the Contractor will, in all solicitations or advertisements for employees placed by

or on behalf of the Agency and the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

- d. The Agency and the Contractor will send to each labor union or representative of workers with which he or she has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Agency contracting officer, advising the labor union or workers representative of the Agency and the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- e. The Agency and the Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- f. The Agency and the Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to books, records and accounts by the contracting Agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- g. In the event of the Agency and the Contractor's non-compliance with the non-discrimination clause of this Agreement or with any of such rules, regulations or orders, this Agreement may be cancelled, terminated or suspended in whole or in part and the Agency and the Contractor may be declared ineligible for further government contracts in accordance with procedures authorized in Executive Order 11246 and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.
- h. The Agency and the Contractor shall incorporate the provisions of 1 through 7 above in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor so that such provisions shall be binding on such subcontractor. The Agency and the Contractor will take such action with respect to any subcontract or purchase order as the contracting Agency may direct as a means of enforcing such provisions including sanctions for non-compliance, provided, however, that in the event the Agency and the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting Agency, the Agency and the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

“(Aplicable a contratos de construcción y subcontratos superiores a \$10,000)

La Agencia y el Contratista deberán cumplir con la Orden Ejecutiva 11246 del 24 de septiembre de 1965, titulada “Igualdad de Oportunidades en el Empleo”, según enmendada por la Orden Ejecutiva 11375 del 13 de octubre de 1967, y según complementada en los reglamentos del Departamento de Trabajo (41 CFR capítulo 60) . Durante la ejecución de este Acuerdo, la Agencia y el Contratista acuerdan lo siguiente:

- a. *La Agencia y el Contratista no discriminarán a ningún empleado o solicitante de empleo por motivos de raza, color, religión, sexo u origen nacional. La Agencia y el Contratista tomarán medidas afirmativas para garantizar que los solicitantes de empleo sean empleados y que los empleados sean tratados durante el empleo, sin distinción de raza, color, religión, sexo u origen nacional. Dicha acción incluirá, pero no se limitará a, lo siguiente: empleo, ascenso, descenso o transferencia; contratación o publicidad de contratación; despido o terminación; tasas de pago u otras formas de compensación; y selección para la formación, incluido el aprendizaje.*
- b. *La Agencia y el Contratista publicarán en lugares visibles, disponibles para los empleados y solicitantes de empleo, los avisos que proporcionará el Oficial de Contrataciones que establezcan las disposiciones de esta cláusula de no discriminación. la Agencia y el Contratista deberán*

declarar que todos los solicitantes calificados recibirán consideración para el empleo sin distinción de raza, color, religión, sexo u origen nacional.

- c. La Agencia y el Contratista, en todas las solicitudes o anuncios de empleados realizados por o en nombre de la Agencia y el Contratista, indicarán que todos los solicitantes calificados recibirán consideración para el empleo sin distinción de raza, color, religión, sexo u origen nacional.*
- d. La Agencia y el Contratista enviarán a cada sindicato o representante de los trabajadores con los que tenga un contrato colectivo de trabajo u otro contrato o entendimiento, un aviso, que será provisto por el oficial de contrataciones de la Agencia, informando al sindicato o representante de los trabajadores de la Agencia y los compromisos del Contratista bajo la Sección 202 de la Orden Ejecutiva 11246 del 24 de septiembre de 1965, y publicará copias del aviso en lugares visibles disponibles para los empleados y solicitantes de empleo.*
- e. La Agencia y el Contratista cumplirán con todas las disposiciones de la Orden Ejecutiva 11246 del 24 de septiembre de 1965 y de las normas, reglamentos y órdenes pertinentes del Secretario del Trabajo.*
- f. La Agencia y el Contratista proporcionarán toda la información e informes requeridos por la Orden Ejecutiva 11246 del 24 de septiembre de 1965, y por las reglas, reglamentos y órdenes del Secretario del Trabajo, o conforme a las mismas, y permitirán el acceso a los libros, registros y cuentas por la Agencia contratante y el Secretario del Trabajo con fines de investigación para verificar el cumplimiento de tales reglas, reglamentos y órdenes.*
- g. En caso de incumplimiento por parte de la Agencia y el Contratista de la cláusula de no discriminación de este Acuerdo o de cualquiera de dichas normas, reglamentos u órdenes, este Acuerdo podrá ser cancelado, rescindido o suspendido en su totalidad o en parte y el La Agencia y el Contratista pueden ser declarados inelegibles para futuros contratos gubernamentales de acuerdo con los procedimientos autorizados en la Orden Ejecutiva 11246 y cualquier otra sanción que se pueda imponer y los recursos invocados según lo dispuesto en la Orden Ejecutiva 11246 del 24 de septiembre de 1965, o por regla, reglamento o orden del Secretario del Trabajo, o según lo disponga la ley.*
- h. La Agencia y el Contratista incorporarán las disposiciones del 1 al 7 anteriores en cada subcontrato u orden de compra, a menos que estén exentos por normas, reglamentos u órdenes del secretario del Trabajo, de modo que dichas disposiciones sean vinculantes para dicho subcontratista. La Agencia y el Contratista tomarán las medidas con respecto a cualquier subcontrato u orden de compra que la Agencia contratante pueda indicar como un medio para hacer cumplir dichas disposiciones, incluidas las sanciones por incumplimiento, siempre que, sin embargo, en caso de que la Agencia y el Contratista se involucra en, o se ve amenazado con, un litigio con un subcontratista o proveedor como resultado de dicha instrucción por parte de la Agencia contratante, la Agencia y el Contratista pueden solicitar a los Estados Unidos que inicien dicho litigio para proteger los intereses de los Estados Unidos.”*

25. Certification Of Nonsegregated Facilities

(Applicable to construction contracts exceeding \$10,000)

The Agency and the Contractor certifies that it does not maintain or provide for its establishments, and that it does not permit employees to perform their services at any location, under its control, where segregated facilities are maintained. It certifies further that it will not maintain or provide for employees any segregated facilities at any of its establishments, and it will not permit employees to perform their services at any location under its control where segregated facilities are maintained. The Agency and the Contractor agrees that a breach of this certification is a violation of the equal opportunity clause of this Agreement.

As used in this certification, the term “segregated facilities” means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms, and other

storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason.

The Agency and the Contractor further agrees that (except where it has obtained for specific time periods) it will obtain identical certification from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the equal opportunity clause; that it will retain such certifications in its files; and that it will forward the preceding notice to such proposed subcontractors (except where proposed subcontractors have submitted identical certifications for specific time periods).

“(Aplicable a contratos de construcción superiores a \$10,000)

La Agencia y el Contratista certifican que no mantienen ni proporcionan sus establecimientos, y que no permiten que los empleados presten sus servicios en ningún lugar, bajo su control, donde se mantengan instalaciones segregadas. Certifica además que no mantendrá ni proporcionará a los empleados ninguna instalación segregada en ninguno de sus establecimientos, y no permitirá que los empleados presten sus servicios en ningún lugar bajo su control donde se mantengan instalaciones segregadas. La Agencia y el Contratista acuerdan que el incumplimiento de esta certificación es una violación de la cláusula de igualdad de oportunidades de este Acuerdo.

Tal como se usa en esta certificación, el término "instalaciones segregadas" significa cualquier sala de espera, áreas de trabajo, baños y lavaderos, restaurantes y otras áreas para comer, relojes registradores, vestuarios y otras áreas de almacenamiento o vestidores, estacionamientos, bebederos, áreas de recreación o entretenimiento, instalaciones de transporte y vivienda provistas para empleados que están segregados por directiva explícita o que, de hecho, están segregados por motivos de raza, color, religión u origen nacional debido a hábitos, costumbres locales o cualquier otra razón.

La Agencia y el Contratista también acuerdan que (excepto cuando haya obtenido por períodos de tiempo específicos) obtendrá una certificación idéntica de los subcontratistas propuestos antes de la adjudicación de subcontratos que superen los \$10,000 que no estén exentos de las disposiciones de la cláusula de igualdad de oportunidades; que conservará dichas certificaciones en sus archivos; y que enviará el aviso anterior a dichos subcontratistas propuestos (excepto cuando los subcontratistas propuestos hayan presentado certificaciones idénticas para períodos de tiempo específicos).”

26. Certification of Compliance with Clean Air and Water Acts

(Applicable to contracts exceeding \$100,000)

The Agency and the Contractor and all subContractors shall comply with the requirements of the Clean Air Act, as amended, 42 U.S.C. § 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 C.F.R. Part 15 and 32, as amended, Section 508 of the Clean Water Act (33 U.S.C. § 1368) and Executive Order 11738. In addition to the foregoing requirements, all nonexempt Contractors and subContractors shall furnish to the owner, the following:

- a. A stipulation by the Agency and the Contractor or subContractors, that any facility to be utilized in the performance of any nonexempt contract or subcontract, is not listed on the Excluded Party Listing System pursuant to 40 C.F.R. 32 or on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 C.F.R. Part 15, as amended.
- b. Agreement by the Agency and the Contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 U.S.C. § 1857 c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 U.S.C. § 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.

- c. A stipulation that as a condition for the award of the Agreement, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the Agreement, is under consideration to be listed on the Excluded Party Listing System or the EPA List of Violating Facilities.
- d. Agreement by the AGENCY AND THE CONTRACTOR that he or she will include, or cause to be included, the criteria and requirements in paragraph (1) through (4) of this section in every nonexempt subcontract and requiring that the Agency and the Contractor will take such action as the government may direct as a means of enforcing such provisions.

“(Aplicable a contratos superiores a \$100,000)

La Agencia y el Contratista y todos los subcontratistas deberán cumplir con los requisitos de la Ley de Aire Limpio, según enmendada, 42 U.S.C. § 1857 et seq., la Ley Federal de Control de la Contaminación del Agua, según enmendada, 33 U.S.C. § 1251 et seq., y las reglamentaciones de la Agencia de Protección Ambiental al respecto, en 40 C.F.R. Partes 15 y 32, según enmendadas, Sección 508 de la Ley de Agua Limpia (33 U.S.C. § 1368) y Orden Ejecutiva 11738. Además de los requisitos anteriores, todos los Contratistas y subcontratistas no exentos deberán proporcionar al propietario lo siguiente:

- a. *Una estipulación por parte de la Agencia y el Contratista o subcontratistas, de que cualquier instalación que se utilizará en la ejecución de cualquier contrato o subcontrato no exento, no se incluye en el Sistema de listado de partes excluidas de conformidad con 40 C.F.R. 32 o en la Lista de instalaciones en infracción emitida por la Agencia de Protección Ambiental (EPA) de conformidad con 40 C.F.R. Parte 15, según enmendada.*
- b. *Acuerdo entre la Agencia y el Contratista para cumplir con todos los requisitos de la Sección 114 de la Ley de Aire Limpio, según enmendada, (42 U.S.C. § 1857 c-8) y la Sección 308 de la Ley Federal de Control de la Contaminación del Agua, según enmendada, (33 USC § 1318) en relación con la inspección, el control, la entrada, los informes y la información, así como todos los demás requisitos especificados en dicha Sección 114 y Sección 308, y todos los reglamentos y directrices emitidos en virtud de los mismos.*
- c. *C. Una estipulación de que, como condición para la adjudicación del Acuerdo, se dará notificación inmediata de cualquier notificación recibida del Director de la Oficina de Actividades Federales, EPA, que indique que se está considerando una instalación utilizada o que se utilizará para el Acuerdo. ser incluido en el Sistema de Listado de Partes Excluidas o en la Lista de Instalaciones Infractoras de la EPA.*
- d. *El acuerdo de la Agencia y el Contratista de que él o ella incluirá, o hará que se incluyan, los criterios y requisitos de los párrafos (1) a (4) de esta sección en cada subcontrato no exento y requiere que la Agencia y el Contratista tomarán la acción que el gobierno pueda ordenar como un medio para hacer cumplir tales disposiciones.”*

27. Anti-Lobbying

(Applicable to contracts exceeding \$100,000)

By the execution of this CONTRACT, the Agency and the Contractor certifies, to the best of his or her knowledge and belief, that:

- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the Agency and the Contractor, to any person for influencing or attempting to influence an officer or employee of an Agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Agency and the Contractor shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- c. The Agency and the Contractor shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all Agency and the Contractor shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

"(Aplicable a contratos superiores a \$100,000)

Mediante la ejecución de este CONTRATO, la Agencia y el Contratista certifican, a su leal saber y entender, que:

- a. *No se han pagado ni se pagarán fondos federales asignados, por o en nombre de la Agencia y el Contratista, a ninguna persona por influir o intentar influir en un funcionario o empleado de una Agencia, un Miembro del Congreso, un funcionario o empleado de Congreso, o un empleado de un miembro del Congreso en relación con la adjudicación de cualquier contrato federal, la realización de cualquier subvención federal, la realización de cualquier préstamo federal, la celebración de cualquier acuerdo de cooperación y la extensión, continuación, renovación, enmienda o modificación de cualquier contrato federal, subvención, préstamo o acuerdo de cooperación.*
- b. *Si se han pagado o se pagarán fondos distintos de los fondos federales asignados a cualquier persona por influir o intentar influir en un funcionario o empleado de cualquier agencia, un miembro del Congreso, un funcionario o empleado del Congreso o un empleado de un miembro del Congreso en relación con este contrato federal, subvención, préstamo o acuerdo de cooperación, la Agencia y el Contratista completarán y presentarán el Formulario estándar-LLL, "Formulario de divulgación para informar cabildeo", de acuerdo con sus instrucciones.*
- c. *La Agencia y el Contratista exigirán que el lenguaje de esta certificación se incluya en los documentos de adjudicación para todas las subadjudicaciones en todos los niveles (incluidos los subcontratos, subsubvenciones y contratos bajo subvenciones, préstamos y acuerdos de cooperación) y que toda la Agencia y el Contratista certificar y divulgar en consecuencia. Esta certificación es una representación material de los hechos en los que se depositó confianza cuando se realizó o se celebró esta transacción. La presentación de esta certificación es un requisito previo para realizar o celebrar esta transacción impuesta por la Sección 1352, Título 31, Código de EE. UU. Cualquier persona que no presente la certificación requerida estará sujeta a una sanción civil de no menos de \$10,000 y no más de \$100,000 por cada incumplimiento."*

28. Bonding Requirements

(Applicable to construction and facility improvement contracts exceeding \$100,000)

The Agency and the Contractor shall comply with Puerto Rico bonding requirements, unless they have not been approved by HUD, in which case the Agency and the Contractor shall comply with the following minimum bonding requirements:

- a. A bid guarantee from each bidder equivalent to five percent (5%) of the bid price. The "bid guarantee" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of

his or her bid, execute such contractual documents as may be required within the time specified.

- b. A performance bond on the part of the Agency and the Contractor for one hundred percent (100%) of the Agreement price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the Agency and the Contractor's obligations under such contract.
- c. A payment bond on the part of the Agency and the Contractor for one hundred percent (100%) of the Agreement price. A "payment bond" is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

"(Aplicable a contratos de construcción y mejora de instalaciones que excedan los \$100,000)

La Agencia y el Contratista deberán cumplir con los requisitos de fianza de Puerto Rico, a menos que no hayan sido aprobados por HUD, en cuyo caso la Agencia y el Contratista deberán cumplir con los siguientes requisitos mínimos de fianza:

- a. *Una garantía de oferta de cada postor equivalente al cinco por ciento (5%) del precio de la oferta. La "garantía de oferta" consistirá en un compromiso firme, como una fianza de oferta, un cheque certificado u otro instrumento negociable que acompañe a una oferta como garantía de que el licitante, al aceptar su oferta, ejecutará los documentos contractuales que sean necesarios dentro del tiempo especificado.*
- b. *Garantía de cumplimiento por parte de la Agencia y el Contratista por el cien por ciento (100%) del precio del Contrato. Una "fianza de cumplimiento" es aquella ejecutada en relación con un contrato para garantizar el cumplimiento de todas las obligaciones de la Agencia y del Contratista en virtud de dicho contrato.*
- c. *Fianza de pago por parte de la Agencia y del Contratista por el cien por ciento (100%) del precio del Contrato. Una "fianza de pago" es aquella ejecutada en relación con un contrato para asegurar el pago requerido por la ley de todas las personas que suministren mano de obra y material en la ejecución del trabajo previsto en el contrato."*

29. Section 3 of the Housing And Urban Development Act Of 1968

(As required by applicable thresholds)

- a. The work to be performed under this Agreement is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. § 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- b. The parties to this Agreement agree to comply with HUD's regulations in 24 C.F.R. Part 135, which implement Section 3. As evidenced by their execution of this Agreement, the parties to this Agreement certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 regulations.
- c. The Agency and the Contractor agrees to send to each labor organization or representative of workers with which the Agency and the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Agency and the Contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications

for each of the positions; and the anticipated date the work shall begin.

- d. The Agency and the Contractor agree to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 C.F.R. Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 C.F.R. Part 135. The Agency and the Contractor will not subcontract with any subcontractor where the Agency and the Contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 C.F.R. Part 135.
- e. The Agency and the Contractor will certify that any vacant employment positions, including training positions, that are filled: (1) after the Contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 C.F.R. Part 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 C.F.R. Part 135.
- f. Noncompliance with HUD's regulations in 24 C.F.R. Part 135 may result in sanctions, termination of this Agreement for default, and debarment or suspension from future HUD assisted contracts.
- g. With respect to work performed in connection with Section 3 covered Indian housing assistance, Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. § 450e) also applies to the work to be performed under this Agreement. Section 7(b) requires that to the greatest extent feasible: (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this Agreement that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7(b).
- h. For contracts exceeding \$100,000, the Agency and the Contractor shall submit Form HUD 60002 (Section 3 Summary Report) to PRDOH on a quarterly basis, notwithstanding the annual reporting requirement set forth in that form's instructions.

“(Según lo requieran los umbrales aplicables)”

- a. *El trabajo a realizar en virtud de este Acuerdo está sujeto a los requisitos de la Sección 3 de la Ley de Vivienda y Desarrollo Urbano de 1968, según enmendada, 12 U.S.C. § 1701u (Sección 3). El propósito de la Sección 3 es asegurar que el empleo y otras oportunidades económicas generadas por la asistencia de HUD o los proyectos asistidos por HUD cubiertos por la Sección 3, en la mayor medida posible, se dirijan a personas de bajos y muy bajos ingresos, en particular personas que son beneficiarios de asistencia de HUD para vivienda.*
- b. *Las partes de este Acuerdo acuerdan cumplir con las regulaciones de HUD en 24 C.F.R. Parte 135, que implementa la Sección 3. Como lo demuestra su ejecución de este Acuerdo, las partes de este Acuerdo certifican que no tienen ningún impedimento contractual o de otro tipo que les impida cumplir con las regulaciones de la Parte 135.*
- c. *La Agencia y el Contratista acuerdan enviar a cada organización laboral o representante de los trabajadores con la que la Agencia y el Contratista tengan un contrato colectivo de trabajo u otro acuerdo, si lo hubiere, un aviso notificando a la organización laboral o representante de los trabajadores de la Agencia y al Los compromisos del contratista bajo esta cláusula de la Sección 3, y publicará copias del aviso en lugares discretos en el lugar de trabajo donde tanto los empleados como los solicitantes de puestos de capacitación y empleo puedan ver el aviso. El aviso describirá la preferencia de la Sección 3, establecerá el número mínimo y los títulos de trabajo sujetos a contratación, la disponibilidad de puestos de aprendizaje y capacitación, las calificaciones para cada uno; y el nombre y ubicación de la(s) persona(s) que acepta(n) las solicitudes para cada uno de los puestos; y la fecha prevista de inicio de la obra.*

- d. *La Agencia y el Contratista acuerdan incluir esta cláusula de la Sección 3 en cada subcontrato sujeto al cumplimiento de las regulaciones en 24 C.F.R. Parte 135, y acepta tomar las medidas apropiadas, según lo dispuesto en una disposición aplicable del subcontrato o en esta cláusula de la Sección 3, al determinar que el subcontratista está violando las regulaciones en 24 C.F.R. Parte 135. La Agencia y el Contratista no subcontratarán con ningún subcontratista cuando la Agencia y el Contratista tengan notificación o conocimiento de que se ha encontrado que el subcontratista ha violado las reglamentaciones de 24 C.F.R. Parte 135.*
- e. *La Agencia y el Contratista certificarán que todos los puestos de trabajo vacantes, incluidos los puestos de capacitación, que se llenen: (1) después de que se seleccione al Contratista pero antes de que se ejecute el contrato, y (2) con personas distintas de aquellas a las que se aplican las reglamentaciones de 24 CFR La Parte 135 requiere que las oportunidades de empleo sean dirigidas, no fueron llenadas para eludir las obligaciones del Contratista bajo 24 C.F.R. Parte 135.*
- f. *Incumplimiento de las reglamentaciones de HUD en 24 C.F.R. La Parte 135 puede dar lugar a sanciones, la rescisión de este Acuerdo por incumplimiento y la inhabilitación o suspensión de futuros contratos asistidos por HUD.*
- g. *Con respecto al trabajo realizado en relación con la asistencia de vivienda indígena cubierta por la Sección 3, la Sección 7(b) de la Ley de Asistencia Educativa y Autodeterminación Indígena (25 U.S.C. § 450e) también se aplica al trabajo que se realizará en virtud de este Acuerdo. La sección 7(b) exige que, en la mayor medida posible: (i) se dé preferencia y oportunidades de capacitación y empleo a los indios, y (ii) se dé preferencia en la adjudicación de contratos y subcontratos a las organizaciones indias y a los indios- Empresas Económicas propias. Las partes de este Acuerdo que están sujetas a las disposiciones de la Sección 3 y la Sección 7(b) acuerdan cumplir con la Sección 3 en la mayor medida posible, pero sin perjuicio del cumplimiento de la Sección 7(b).*
- h. *Para contratos que excedan los \$100,000, la Agencia y el Contratista deberán presentar el Formulario HUD 60002 (Informe resumido de la Sección 3) a Vivienda trimestralmente, sin perjuicio del requisito de informe anual establecido en las instrucciones de ese formulario."*

30. Fair Housing Act

The Agency and the Contractor shall comply with the provisions of the Fair Housing Act of 1968, as amended. The Act prohibits discrimination in the sale or rental of housing, the financing of housing or the provision of brokerage services against any person on the basis of race, color, religion, sex, national origin, disability, or familial status. The Equal Opportunity in Housing Act prohibits discrimination against individuals on the basis of race, color, religion, sex or national origin in the sale, rental, leasing or other disposition of residential property, or in the use or occupancy of housing assisted with Federal funds.

"La Agencia y el Contratista deberán cumplir con las disposiciones de la Ley de Vivienda Justa de 1968, según enmendada. La Ley prohíbe la discriminación en la venta o alquiler de viviendas, la financiación de viviendas o la prestación de servicios de corretaje contra cualquier persona por motivos de raza, color, religión, sexo, origen nacional, discapacidad o estado familiar. La Ley de Igualdad de Oportunidades en la Vivienda prohíbe la discriminación contra las personas por motivos de raza, color, religión, sexo u origen nacional en la venta, alquiler, arrendamiento u otra disposición de propiedad residencial, o en el uso u ocupación de viviendas asistidas con fondos federales."

31. Energy Policy and Conservation Act

The Agency and the Contractor shall comply with mandatory standards and policies relating to energy efficiency as contained in the Government of Puerto Rico's energy conservation plan, issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq).

"La Agencia y el Contratista deberán cumplir con las normas y políticas obligatorias relacionadas con la eficiencia energética contenidas en el plan de conservación de energía del Gobierno de Puerto

Rico, emitido en cumplimiento de la Ley de Política y Conservación de Energía (42 U.S.C. 6201 et seq)."

32. Hatch Act

The Agency and the Contractor agrees to comply with mandatory standards and policies relating to Hatch Act, Public Law 94-163, as amended. The Hatch Act applies to political activities of certain state and local employees. As a Puerto Rico Department of Housing Subrecipient, you may do any of the following activities be a candidate in nonpartisan elections; attend political meetings and conventions; contribute money; campaign in partisan elections; and hold office in political parties. The Agency and the Contractor may not do the following activities be a candidate in partisan elections; use official influence to interfere in elections; coerce political contributions from subordinates in support of political parties or candidates the office of special counsel operates a website that provides guidance concerning hatch act issues.

"La Agencia y el Contratista acuerdan cumplir con las normas y políticas obligatorias relacionadas con la Ley Hatch, Ley Pública 94-163, según enmendada. La Ley Hatch se aplica a las actividades políticas de ciertos empleados estatales y locales. Como subreceptor del Departamento de la Vivienda de Puerto Rico, podrá realizar cualquiera de las siguientes actividades: ser candidato en elecciones no partidistas; asistir a reuniones y convenciones políticas; aportar dinero; campaña en elecciones partidistas; y ocupar cargos en partidos políticos. La Agencia y el Contratista no podrán realizar las siguientes actividades: ser candidato en elecciones partidistas; utilizar la influencia oficial para interferir en las elecciones; coaccionar contribuciones políticas de subordinados en apoyo de partidos políticos o candidatos la oficina del abogado especial opera un sitio web que brinda orientación sobre asuntos relacionados con la ley Hatch."

33. Health And Safety Standards

All parties participating in this project agree to comply with Sections 107 and 103 of the Contract Work Hours and Safety Standards Act. Section 107 of the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions, which are unsanitary, hazardous, or dangerous to his or her health and safety as determined under construction, safety, and health standards promulgated by the Secretary of Labor. These requirements do not apply to the purchase of supplies or materials or articles ordinarily available on the open market, or contracts for transportation.

"Todas las partes que participan en este proyecto acuerdan cumplir con las Secciones 107 y 103 de la Ley de normas de seguridad y horas de trabajo por contrato. La Sección 107 de la Ley se aplica al trabajo de construcción y establece que no se exigirá a ningún trabajador o mecánico que trabaje en entornos o en condiciones de trabajo que sean antihigiénicas, peligrosas o peligrosas para su salud y seguridad, según se determine en las normas de construcción, seguridad, y normas sanitarias promulgadas por la Secretaría del Trabajo. Estos requisitos no se aplican a la compra de suministros o materiales o artículos normalmente disponibles en el mercado libre, o contratos de transporte."

34. Personnel

The Agency and the Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under this Agreement. Such personnel shall not be employees of, or have any contractual relationship with, the contracting party. All the services required hereunder will be performed by the Agency and the Contractor or under its supervision, and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under State and local law to perform such services. No person who is serving sentence in a penal or correctional institution shall be employed on work under this Contract.

"La Agencia y el Contratista declaran que tienen, o asegurarán a sus expensas, todo el personal requerido para prestar los servicios bajo este Acuerdo. Dicho personal no podrá ser empleado ni tener ninguna relación contractual con la parte contratante. Todos los servicios requeridos en virtud del presente serán realizados por la Agencia y el Contratista o bajo su supervisión, y todo el personal involucrado en el trabajo deberá estar completamente calificado y deberá estar autorizado o

autorizado según las leyes estatales y locales para realizar dichos servicios. Ninguna persona que esté cumpliendo sentencia en una institución penal o correccional podrá ser empleada en trabajos bajo este Contrato.”

35. Withholding Of Wages

If in the performance of this Agreement, there is any underpayment of wages by the Agency and the Contractor or by any subcontractor thereunder, the PRDOH may withhold from the Agency and the Contractor out of payment due to him or her an amount sufficient to pay to employees underpaid the difference between the wages required thereby to be paid and the wages actually paid such employees for the total number of hours worked. The amounts withheld may be disbursed by the PRDOH for and on account of the Agency and the Contractor or subcontractor to the respective employees to whom they are due.

“Si en el cumplimiento de este Acuerdo, hay algún pago insuficiente de salarios por parte de la Agencia y el Contratista o por cualquier subcontratista en virtud del mismo, Vivienda puede retener de la Agencia y el Contratista del pago adeudado a él o ella una cantidad suficiente para pagar a los empleados pagaron de menos la diferencia entre los salarios requeridos y los salarios realmente pagados a dichos empleados por el número total de horas trabajadas. Las cantidades retenidas podrán ser desembolsadas por Vivienda para y por cuenta de la Agencia y del Contratista o subcontratista a los respectivos empleados a quienes corresponda.”

36. Claims And Disputes Pertaining to Wage Rates

Claims and disputes pertaining to wage rates or to classifications of professional staff or technicians performing work under this Contract shall be promptly reported in writing by the Agency and the Contractor to the PRDOH for the latter's decision, which shall be final with respect thereto.

“Las reclamaciones y disputas relacionadas con las tarifas de salarios o con las clasificaciones del personal profesional o de los técnicos que realicen trabajos bajo este Contrato deberán ser notificadas por escrito de inmediato por la Agencia y el Contratista a Vivienda para la decisión de este último, que será final con respecto a los mismos.”

37. Discrimination Because Of Certain Labor Matters

No person employed on the services covered by this Agreement shall be discharged or in any way discriminated against because he or she has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable hereunder to his or her employer.

“No se despedirá a ninguna persona empleada en los servicios cubiertos por este Acuerdo ni se la discriminará de ninguna manera porque haya presentado una queja o iniciado o hecho que se inicie un procedimiento o haya testificado o esté a punto de testificar en cualquier procedimiento bajo o relacionado a las normas laborales aplicables en virtud de la presente a su empleador.”

38. Interest Of Members Of Local Public Agency And Others

The Agency and the Contractor agrees to establish safeguards to prohibit employees from using positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have a family, business, or other tie. The Agency and the Contractor will be aware of and avoid any violation of the laws of this State which prohibit municipal officers and employees from having or owning any interest or share, individually or as agent or employee of any person or corporation, either directly or indirectly, in any contract made or let by the governing authorities of such municipality for the construction or doing of any public work, or for the sale or purchase of any materials, supplies or property of any description, or for any other purpose whatsoever, or in any subcontract arising therefrom or connected therewith, or to receive, either directly or indirectly, any portion or share of any money or other thing paid for the construction or doing of any public work, or for the sale or purchase of any property, or upon any other contract made by the governing authorities of the municipality, or subcontract arising therefore or connected therewith.

The Agency and the Contractor will also be aware of and avoid any violation of the laws of this State which prescribe a criminal penalty for any public officer who has an interest in any contract passed by the board of which he or she is a member during the time he or she was a member and for one year thereafter.

“La Agencia y el Contratista acuerdan establecer salvaguardas para prohibir que los empleados utilicen puestos para un propósito que esté o parezca estar motivado por un deseo de ganancia privada para ellos mismos o para otros, particularmente aquellos con quienes tienen una familia, negocio o otra corbata. La Agencia y el Contratista estarán al tanto y evitarán cualquier violación de las leyes de este Estado que prohíben que los funcionarios y empleados municipales tengan o sean propietarios de cualquier interés o participación, individualmente o como agente o empleado de cualquier persona o corporación, ya sea directa o indirectamente. , en cualquier contrato hecho o otorgado por las autoridades gobernantes de dicho municipio para la construcción o ejecución de cualquier obra pública, o para la venta o compra de cualquier material, suministro o propiedad de cualquier tipo, o para cualquier otro propósito, o en cualquier subcontrato que surja o esté relacionado con el mismo, o para recibir, ya sea directa o indirectamente, cualquier porción o parte de cualquier dinero u otra cosa pagada por la construcción o realización de cualquier obra pública, o por la venta o compra de cualquier propiedad, o por cualquier otro contrato que celebren las autoridades rectoras del municipio, o subcontrato derivado o relacionado con el mismo.

La Agencia y el Contratista también conocerán y evitarán cualquier violación de las leyes de este Estado que prescriben una sanción penal para cualquier funcionario público que tenga interés en cualquier contrato aprobado por la junta de la que él o ella es miembro durante el tiempo que él o ella fue miembro y por un año a partir de entonces.”

39. Interest Of Certain Federal Officers

No member of, or delegate to, the Congress of the United States and no Resident Commissioner shall be admitted any share or part of this Agreement or to any benefit to arise therefrom.

“Ningún miembro o delegado del Congreso de los Estados Unidos y ningún Comisionado Residente serán admitidos en ninguna parte o parte de este Acuerdo o en cualquier beneficio que surja del mismo.”

40. Interest Of Agency and the Contractor

The Agency and the Contractor agrees that it presently has no interest and shall not acquire any interest, direct or indirect, in the above-described project or any parcels therein or any other interest which would conflict in any manner or degree with the performance of the Work hereunder. The Agency and the Contractor further agrees that no person having any such interest shall be employed in the performance of this Agreement.

“La Agencia y el Contratista acuerdan que actualmente no tiene ningún interés y no adquirirá ningún interés, directo o indirecto, en el proyecto descrito anteriormente o en cualquier parcela del mismo o cualquier otro interés que entraría en conflicto de alguna manera o grado con el desempeño del Trabajo a continuación. La Agencia y el Contratista acuerdan además que ninguna persona que tenga dicho interés será empleada en la ejecución de este Acuerdo”.

41. Political Activity

The Agency and the Contractor will comply with the provisions of the Hatch Act (5 U.S.C. 1501 et seq.), which limits the political activity of employees.

“La Agencia y el Contratista cumplirán con las disposiciones de la Ley Hatch (5 U.S.C. 1501 et seq.), que limita la actividad política de los empleados.”

42. Religious Activity

The Agency and the Contractor agrees to abstain from using any funds related to this Agreement for

inherently religious activities prohibited by 24 CFR 570.200(j), such as worship, religious instruction, or proselytization.

“La Agencia y el Contratista acuerdan abstenerse de utilizar cualquier fondo relacionado con este Acuerdo para actividades inherentemente religiosas prohibidas por 24 CFR 570.200(j), como culto, instrucción religiosa o proselitismo.”

43. Flood Disaster Protection Act Of 1973

The Agency and the Contractor will ensure that procedures and mechanisms are put into place to monitor compliance with all flood insurance requirements as found in the Flood Disaster Protection Act of 1973, 24 C.F.R. § 570.605.

La Agencia y el Contratista acuerdan abstenerse de utilizar cualquier fondo relacionado con este Acuerdo para actividades inherentemente religiosas prohibidas por 24 CFR 570.200(j), como culto, instrucción religiosa o proselitismo.

44. Lead Based Paint

The Agency and the Contractor must comply with the regulations regarding lead-based paint found at 24 C.F.R. § Part 35 on Lead-Based Paint Poisoning Prevention In Certain Residential Structures with regards to all housing units assisted using CDBG- DR funds.

La Agencia y el Contratista deben cumplir con las reglamentaciones sobre pintura a base de plomo que se encuentran en 24 C.F.R. § Parte 35 sobre la prevención del envenenamiento por pintura a base de plomo en ciertas estructuras residenciales con respecto a todas las unidades de vivienda asistidas con fondos de CDBG-DR.

45. Value Engineering

(Applicable to construction contracts exceeding \$2,000 when required by Federal program legislation.)

The Agency and the Contractor must comply with the regulations regarding systematic and organized approach to analyze functions of systems, equipment, facilities, services, and materials to ensure they achieve their essential functions at the lowest cost consistent to life cycle in execution, reliability, quality, and safety, in accordance with 2 C.F.R. § 200.318.(g).

(Aplicable a contratos de construcción que excedan los \$2,000 cuando lo exija la legislación del programa federal).

La Agencia y el Contratista deben cumplir con las normas relativas al enfoque sistemático y organizado para analizar las funciones de los sistemas, equipos, instalaciones, servicios y materiales para asegurar que logren sus funciones esenciales al menor costo consistente con el ciclo de vida en ejecución, confiabilidad, calidad. y seguridad, de acuerdo con 2 C.F.R. § 200.318.(g).

We certify that we will comply with the clauses and conditions established by the aforementioned laws and regulations.

Certificamos que cumpliremos con las cláusulas y condiciones establecidas por las leyes y reglamentos antes mencionados.

Company/Compañía

Name/Nombre

Corporate Seal/Sello Corporativo

Signature/Firma

Position/Puesto que Ocupa

Date/Fecha

Attachment 5

HUD 4010

Applicability

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4. Apprentices and Trainees.

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

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

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

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

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

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

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

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

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

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

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

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

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

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

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

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

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

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

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

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

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

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

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

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

Attachment 6

IMPERATIVE INCLUSION CLAUSES

OGP Circular Letter 2021 – 13. In accordance with OGP Circular Letter 2021 – 13, all professional services contracts valued over \$250,000.00 are to include the following clauses.

Contract Review Policy of the Fiscal Oversight and Management Board of Puerto Rico: The Parties acknowledge that the CONTRACTOR has submitted the certification titled "Contractor Certification Requirement" required in accordance with the Fiscal Oversight and Management Board of Puerto Rico, effective as of November 6, 2017 and as amended on October 30, 2020, signed by the Contractor's Executive Director (or another official with an equivalent position or authority to issue such certifications).

At the time of signing this contract, the Contractor, maintains a current contractual relationship with the following entities of the Government of Puerto Rico: [Entity # 1; Entity # 2, and Entity # 3]. The Contractor certifies that the aforementioned are all entities of the Government of Puerto Rico with which it has a contractual relationship. In addition, the Contractor recognizes and accepts that failing to mention any governmental entity, with which it has a current contractual relationship, may result in the termination of this contract if required by the Agency.

The Agency certifies that the Contractor was selected as the provider of the professional services described in this contract in accordance with the provisions in Executive Order 2021-029. Likewise, both parties certify that they are aware of the provisions of said Executive Order and Circular Letter and that any contract covered by it that has not followed the processes and requirements established therein will be terminated.

At the time of signing this contract, The Contractor certifies that it is a public corporation duly registered and authorized to issue shares. The Contractor certifies that the shares issued in its name and in circulation are exchanged in a duly regulated stock exchange.

Non corporate: At the time of signing this contract, the Contractor certifies that it is not a public corporation with shares exchanged in a duly regulated stock exchange. The Contractor certifies that prior to signing this contract it has completed the Certification on Legal Persons and has provided it to the Agency.

**CLÁUSULAS DE INCLUSIÓN IMPERATIVA EN TODO CONTRATO DE
SERVICIOS PROFESIONALES O COMPRADOS (Carta Circular 001-2021)**

Todos los contratos de servicios profesionales o comprados cuya cuantía exceda diez mil dólares (\$10,000) deberán contener textualmente las siguientes cláusulas:

- a. Cláusula de servicios interagenciales: Ambas partes contratantes reconocen y acceden a que los servicios contratados podrán ser brindados a cualquier entidad de la Rama Ejecutiva con la cual la entidad contratante realice el acuerdo interagencial o por disposición directa de la Secretaría de la Gobernación. Estos servicios se realizarán bajo los mismos términos y condiciones en cuanto a horas de trabajo y compensación consignados en este contrato. Para efectos de esta cláusula, el término entidad de la Rama Ejecutiva incluye a todas las agencias del Gobierno de Puerto Rico, así como a las instrumentalidades y corporaciones públicas y a la Oficina del Gobernador.
- b. Cláusula de terminación: La Secretaría de la Gobernación tendrá la facultad para dar por terminado el presente contrato en cualquier momento.
- c. Política de Revisión de Contratos de la Junta de Supervisión y Administración Financiera para Puerto Rico: Las Partes reconocen que el CONTRATISTA ha presentado la certificación titulada "Requisito de Certificación del Contratista, requerida de conformidad con la Política de Revisión de Contratos de la Junta de Supervisión y Administración Financiera para Puerto Rico, vigente a partir del 6 de noviembre de 2017 y según enmendada el 30 de octubre de 2020, firmada por el Director Ejecutivo del Contratista (u otro funcionario con una posición o autoridad equivalente para emitir tales certificaciones). Se incluye como anejo a este Contrato, copia firmada del "Requisito de Certificación del Contratista".