

PROJECT: B117 LED Light Fixture Retrofit, Job No. CA-1817

**PROJECT LOCATION: Hawaii Army National Guard
Building 117
91-1227 Enterprise Avenue
Kapolei, HI 96707-2150**

1. SCOPE OF WORK:

The Contractor/Vendor shall provide all labor, materials, and use of equipment necessary to implement the following:

Provide and install LED light fixtures to replace existing fixtures. Contractor to furnish and install:

Base Bid item: Areas A-N, including Mezzanine Area C

1. Provide and install seven-hundred four (704) ceiling recessed LED light fixtures.
 - o Including 1x4, 2x2 and 2x4 fixtures.
 - o Include Emergency backup option for new fixtures as indicated on drawings.
2. Provide and install eight (8) wall mount LED light fixtures with emergency backup.
3. Provide and install twenty-one (21) exterior wall mount LED light fixtures.
4. Provide and install five (5) direct arm pole mount LED light fixtures.
5. Provide and install one (1) new canopy LED light fixture.
6. Modify lighting control circuits and install sixteen (16) dimmers in six (6) classrooms.
- 6a. Provide and install thirty-four (34) dimmers, modify electrical lighting controls in select offices and rooms.
7. Remove and demo required existing fixtures. Existing LED fixtures to remain.
8. Run network cable from existing lighting controls panel to network communication room.

Deductive item: Areas G-H, including Mezzanine Area C

- 1a. Provide and install seventy (70) ceiling recessed LED light fixtures in deductive Areas.
 - 6a. Provide and install thirty-four (34) dimmers, modify electrical lighting controls in select areas.
 - 7a. Remove and demo of fixtures required in existing listed deductive areas. Existing LED fixtures to remain.
 8. Run network cable from existing lighting controls panel to network communication room.
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- A. Provide and install all new electrical components, wires, breakers, disconnect safety switches and all other electrical requirements for proper install.
 - B. As required: furnish and install conduit, boxes, field-installed accessories, reflectors and misc. materials; all NEMA disconnects, conduits, boxes, low-voltage wire management, power packs, faceplates etc. paint to match existing.
 - C. Verify new fixtures function properly with existing lighting controls in select areas.

See attached drawings, for reference only.

See Specifications for material requirements and quantities.

See attachments for quantity

2. INVESTIGATION

- a. Contractor responsible to make necessary field surveys and investigations as required to consider the existing conditions. Inspection includes, but is not limited to, determining the condition of the existing equipment and components listed under the scope of work. Note and locate all items needing special attention.
- b. Provide recommendations of any actions to be done to existing components prior to installing any new equipment. Provide separate cost if deemed appropriate.
- c. Pictures furnished by the government to the consultant may be used for general information only and shall not be relied upon or used as the basis for preparation of design drawings required by this contract without complete verification by the consultant.
- d. Existing lighting controls panel is Douglas WLC-3150 Dialog Lighting Control Unit in Area A room L100. Communication Rm is L113.

3. SHOP DRAWINGS

Provide any shop drawings required to show the general layout of the systems involved and to clearly show the extent, type and detailed requirements of the construction work. In addition, provide specific, project-unique details to fully define the work. Drawings shall include but not be limited to:

- a. Schedules as required
- b. Typical sections
- c. Construction details
- d. Latest manufacturer's installation instructions

4. SPECIFICATIONS

Seven-hundred four (704) per fixture variations:

Fixture: Four (4) CREE CR14-31L-40K-10V (or approved equal). As required –EB14 (or approved equal)

Fixture: Fifty-five (55) CREE CR22-32L-40K-10V (or approved equal). As required - EB14 (or approved equal)

Fixture: Five-hundred thirty (530) CREE CR24-40L-40K-10V (or approved equal). As required -EB14 (or approved equal)

Fixture: One-hundred fifteen (115) CREE CR24-40L-40K-10V-CMA (or approved equal). As required -EB10W (or approved equal)

Wall Mount Fixture: Eight (8) CREE LS4-25L-40K-10V-EB14 (or approved equal)

Direct Arm Mount: Five (5) CREE ARE-EDG-2MB-DA-06-E-UL-BZ-525-40K-ML (or approved equal)

Exterior Wall Mount: Twenty-one (21) CREE SEC-EDG-3MB-WM-04-E-UL-BZ-525-40K-ML (or approved equal)

Canopy Fixture in Area L: One (1) CREE CAN-EDG-PS-PD-04-E-UL-SV-525-ML (or approved equal)

Accessories: CREE XA-CL18KIT, CREE XA-CLHOOK (or approved equal)

Dimmer 0-10V: Lutron Diva series LED 0-10VDC (or approved equal)

Power Pack (as required): Lutron PP-DV (or approved equal)

0-10V cabling: Liberty 18-2C-LVBP (or approved equal)

Network cabling: CAT6 Liberty 24-4P-P-L6SH (or approved equal)

- A. All equipment and material shall be UL listed, meet Buy America Act requirements and have standard 10-year warranty on light fixture system.
- B. Equipment and material specified by catalog numbers and names: In case of obsolescence, supersede, or error in identification, the intent implied by the description, application, required performance and the features of competitive brands also listed shall govern.
- C. All equipment and materials shall be suitable for intended location and use and include all accessories for proper installation and operation.
- D. Salt air corrosion protective coating to extend life and improve performance.

5. Energy Rebates:

- a. Documentation shall be provided for Hawaii Energy rebates offered by the electrical utility company where practicable.
- b. Upon completion of project, Contractor shall fill out energy rebate application forms for customer submission to Hawaii Energy.

6. Solid Waste:

Submit solid waste report for all demolition material. Report to reflect tonnage of recycled, debris and/or disposal of demolition material.

Eg.: - Light Fixtures (various makes: Columbia P4-24-332G-LD36-S-EB8-277V, Crescent 24-SG-2-32-RA-A1-B-L2A-BO)

SUBMITTALS:

1. Submit Certificates or Licenses as proofs that the General Contractor and Sub-Contractors are certified or licensed to perform the job as detailed in the Scope of Work / Specifications.
2. Submit to the DOD Project Manager for approval, three (3) sets each of material Manufacturer's product catalog/specifications (luminaries).
3. Submit to the DOD Project Manager three (3) sets of product catalogs/specifications of all other major non-equipment materials (fixtures, conduits, wires, disconnect switches, other devices).
4. Submit Manufacturer's Warranty stating the following:
 - Ten (10) years warranty on light fixture system from the date of installation and acceptance, to the original User of the equipment (through DOD Project Manager) if it should prove defective workmanship or defective materials.
 - The Manufacturer shall replace the defective parts without charges to the Government.
5. Submit a written "warranty" that the completed project shall be free from any workmanship or materials defects for a period of one (1) year (for all non-A/C equipment/units portion of the project) starting from the date of project's formal acceptance. The warranty shall state that, in case of any workmanship defect/s that will occur within the period of one (1) year, the Contractor shall implement the necessary corrective work without charging the Government for the costs of materials, labor, and equipment use.
6. Prior to start of work, the Contractor shall prepare and submit to the DOD Project

Manager, the Work and Health/Safety Program for review and approval. The Program shall outline emphasis on the regulations set by OSHA, EPA, and other Federal, State or Local Agencies.

SAFETY MEASURES IMPLEMENTATION, OTHER INSTRUCTIONS TO BIDDERS:

1. The Contractor must implement all safety measures in accordance with the present OSHA, Local, and Federal Government Rules and Regulations. Required Personal Protective Equipment (PPE) shall always be worn by the Contractor's workers during implementation of work. Warning signs/tapes, cones, and barricades shall be posted/in-place where and when necessary.
2. Disposal of old A/C unit (refer to Scope of Work Item No. 1 and Environmental Instructions on **Page 08 of 09**)
3. The Contractor shall provide own power generating equipment if needed for the job.

HIARNG Environmental Reports preparation/submittals, Permits, and Instructions:

- A. Mandatory Environmental Logs and Report.
The Contractor shall read and comply with the instructions shown in the attached HIARNG Environmental Contractor Requirements in the preparation and submittal of Hazardous Materials Inventory Log, Monthly Waste Generation Report, Spill Prevention Control and Countermeasure Plan, and other requirements listed, applicable to the Project.
- B. The Contractor shall be responsible for the assessment, application, payment, and for obtaining the required Environmental Permits for the transport and disposal of hazardous and solid wastes.
- C. The Contractor shall characterize and identify disposal requirements for old HVAC cooling water, refrigerant, and used oil (which may contain regulated refrigerant) through coordination with HIARNG Environmental Office to ensure compliance with applicable hazardous waste and wastewater regulations and permits.
- D. Old HVAC electronic components and fuses shall be disposed in compliance with HIARNG and City and County requirements for E-waste disposal.
- E. During CMU walls and concrete slab coring/drilling, the Contractor must recover concrete dust to prevent it from entering storm drains located around Bldg 825
- F. Disposal of chemicals, paint, paint brush, and concrete dust rinse water into any inlets of rain water drain and sewer lines inside the HIARNG Compound and the nearby outside inlets tied in to the HIARNG drain system shall constitute violations of HIARNG's sanitary sewer and NPDES permits. No chemicals or rinsed water shall be disposed into the inlets of HIARNG's rain water or sewer lines/system or on the open grounds inside and nearby the HIARNG Compound. Daily cleaning of paint brushes and other equipment must be done in a way that chemicals and paint-diluted water (waste water) must be contained in the Contractor-owned leak-proof container. All waste water must be hauled out of the HIARNG Compound and dumped into an EPA or City & County approved dumping station.
- G. If Contractor-owned electric power generator is brought at site, the Contractor must supply sufficient spill response supplies. If spills occur, the Contractor must implement proper cleanup work immediately.

ATTACHMENTS:

1. Scope of Work, Specifications, Submittals, Instruction to Bidders, etc.

2. Pictures
3. ACT 68 Form (one page).
4. HIARNG Environmental Contractor Requirements (two pages)
5. HIARNG Spill Incident Report (one page)
6. Monthly Waste Generation Report (one page)
7. Hazardous Materials Inventory Log (one page)