Statement of Work

Replace HVAC System Components

Visitor Center – Building 213

Fort San Cristóbal – San Juan National Historic Site

501 Calle Norzagaray

San Juan, Puerto Rico

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1. Project Title

Replace HVAC System Components – Visitor Center (Building 213)

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2. Project Location

Fort San Cristóbal
San Juan National Historic Site

Visitor Center – Building 213

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3. Background

The Visitor Center at Building 213 currently operates multiple aging HVAC condensing units that have experienced declining efficiency and reliability. Due to the coastal marine environment, the existing systems are exposed to salt air corrosion, reducing the service life of equipment.

This project replaces the existing condensing units and associated system components with high-efficiency, corrosion-resistant HVAC equipment meeting modern industry standards. The new systems will improve energy efficiency, reliability, and climate control, ensuring continued operation of the visitor facility.

4. Scope of Work

The Contractor shall provide all labor, materials, equipment, supervision, and services necessary to remove existing HVAC equipment and install new high-efficiency HVAC systems at the Visitor Center (Building 213).

All work shall comply with manufacturer specifications, industry standards, and applicable Federal, State, and local codes.

The Contractor shall provide an on-site superintendent or foreman present at all times during active work.

5. Existing Condensing Units to be Replaced

Location	Tonnage	Manufacturer	Model Number
Location 1	5 Ton	Trane	4TTR6060E1000NA
Location 2	5 Ton	Trane	4TTR6061C1000AA
Location 3	5 Ton	Trane	4TTV0048A1000CD
Location 4	5 Ton	Gree	FLEE60AC230V1A0
Location 5	5 Ton	Gree	FLEXX60AC230V1A0
Location 6	4 Ton	Trane	3048E1000PB
Location 7	4 Ton	Trane	3048E1000PB
Location 8	4 Ton	Trane	4TTR3048E100PB

Total units to replace: **8**

6. Equipment Requirements

All new HVAC equipment shall meet the following requirements:

• Units shall be manufactured in the United States.
• Minimum SEER rating: 22 or greater.
• Electrical system: 208/230 Volt.
• Minimum Warranty:

- 7-Year Compressor Warranty
- 5-Year Parts Warranty

Corrosion Protection

Due to the coastal environment, all exterior condensing units shall include:

- Anti-corrosion condenser coil coating
- Components rated for saltwater environments
- Materials resistant to corrosion

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7. Installation Requirements

The Contractor shall perform the following installation work:

Condensing Units

• Install new exterior condensing units at existing locations.
• Each unit shall include breaker panel circuit labeling identifying the corresponding condenser unit.
• Each unit shall include a disconnect switch located in the immediate vicinity.

Disconnect switches shall be:

- Non-metallic
- NEMA 4X rated enclosure
- Mennekes brand or approved equal

Refrigerant Piping

All existing refrigerant piping shall be removed and replaced.

New piping requirements:

• New copper tubing shall be ACR Type or Type L copper.
• Tubing sizes shall be verified and matched to evaporator and condenser requirements prior to installation.
• Suction lines shall include all-weather insulation.
• Liquid lines shall be properly sized and field verified.

Piping Protection

• Refrigerant lines passing through floors or concrete walls shall be installed inside PVC conduit.

Electrical Work

• Remove all existing electrical connections.
• Install new wiring from breaker panels to condenser and evaporator units.
• All electrical installations shall comply with the National Electrical Code (NEC).

Equipment Anchoring

Exterior condensing units exposed to open-air environments shall include:

• Corrosion-resistant wind anchoring systems
• Rooftop unit base pedestals
• Stainless steel tie-down hardware

Units shall be mounted without roof penetrations under any circumstances.

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8. Removal and Disposal

The Contractor shall:

• Remove all existing condensing units and associated wiring.
• Recover all refrigerants in accordance with EPA regulations.
• Dispose of equipment and refrigerants in accordance with Federal, State, and local regulations.

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9. Coordination

The Contractor shall coordinate all work with San Juan National Historic Site (SAJU) staff.

Requirements include:

• Minimum 24-hour notice before utility interruptions.
• Utility interruptions shall not exceed one (1) working day.
• Notify SAJU Administration 24 hours prior to excavation or area closures.

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10. Fire Safety Requirements

When performing hot work:

• A fire extinguisher shall be present at all times.
• Contractor must certify the work area is free from fire hazards.
• Contractor shall notify the COR before using open flame or heat to solder pipes because the fire suppression system is heat sensitive.

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11. Site Protection and Restoration

The Contractor shall:

• Protect all surrounding areas during construction.
• Restore affected areas to original condition.
• Repair any damage at no cost to the Government.
• Maintain a clean jobsite daily.

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12. Training

The Contractor shall provide training for park maintenance staff.

Training requirements:

• Minimum 2-hour training session
• For four (4) NPS maintenance personnel
• Training shall include:

- System operation
- Maintenance procedures
- Troubleshooting basics

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13. Deliverables

Prior to Notice to Proceed

The Contractor shall submit:

• Equipment product submittals for COR approval
• Unit dimensions and weight

Prior to Contract Closeout

The Contractor shall provide:

• Two (2) hard-bound copies of Operation and Maintenance (O&M) Manuals
• One (1) hard-bound copy of warranty documentation
• List of equipment model and serial numbers
• Completion of required training for park personnel

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14. Government Furnished Property

None.

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15. Safety Requirements

The Contractor shall comply with:

• OSHA regulations
• Federal safety standards
• Site-specific safety requirements

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16. Security Requirements

Contractor personnel shall:

• Not enter the archives room or artifacts room without NPS supervision.
• Follow all site security procedures.

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17. Travel and Logistics

The Contractor shall be responsible for all travel expenses, including:

• Mobilization
• Equipment transport
• Materials
• Lodging
• Meals
• Per diem

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18. Quality Control

The Contractor shall develop and implement a Quality Control (QC) Plan to ensure all services meet accepted commercial practices.

The QC plan shall:

• Identify critical inspection points
• Prevent defective work
• Ensure corrective action and non-recurrence

The Government may conduct periodic performance evaluations during the project.

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19. Applicable Codes and Standards

All work shall comply with the most current versions of:

• NFPA 101 – Life Safety Code
• International Building Code (IBC)
• ASHRAE Standards and Guidelines
• NEBB Standards
• AABC Standards
• National Electrical Code (NEC)
• OSHA Regulations
• Federal, State, and Local Building Codes
• Utility company requirements (as applicable)

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20. Period of Performance

The Contractor shall complete all work within 90 calendar days after Notice to Proceed (NTP).