1. **280000 – x-ray ai system**
   1. **GENERAL**
      1. **SUMMARY**
         1. Contractor Shall Provide and Install
            1. The materials and labor required for the installation of weapons detection systems include, but are not limited to:

X-Ray AI-assisted baggage scanner

Walk-through metal detection systems

System software, licenses, and integrations

* + - * 1. Although such work is not specifically mentioned herein or on the Drawings, the Contractor shall furnish and install all miscellaneous items, accessories, appurtenances, and devices incidental to or necessary for a sound, secure, and complete installation, without claim for additional payment.
      1. Related Sections:
         1. Section 000000 – Procurement and Contracting Requirements
         2. Section 010000 – General Requirements
         3. Division 26 and 27 Electrical and Cabling Sections
         4. Section 280000 – Common Work Results for Security
         5. Section 281000 – Access Control and Alarm Management System
         6. Section 282000 – Video Surveillance System
      2. References:
         1. National Electrical Code
         2. International Electrical Code
         3. Local Codes
    1. **SYSTEM DESCRIPTION**
       1. X-Ray AI System
          1. System shall combine software, modular hardware components, and operating procedures as part of the Athena Command Center platform.
          2. Provide real-time image and alert transmission to browser, mobile, or 3rd party systems.
          3. Be integrated with Access Control and Alarm Management System (ACAMS), Video Management System (VMS), and Visitor Management System via REST API.
          4. Work in tandem with walk-through metal detectors to reduce false positives. Cabling, power, and conduit infrastructure will be provided to support devices.
          5. System will be tested to ensure failures are remediated, and that the system will be turnkey. System sensitivity will be configured to meet facility security requirements.
    2. **qualifications**
       1. Contractor shall have a proven track record in the field of specified cabling and system installations, with at least (3) previous installations of comparable size and complexity undertaken within the last (5) years.
       2. Contractor shall be a manufacturer’s authorized distributor and warrantee station for the equipment offered, and shall maintain a fully equipped service organization capable of furnishing adequate repair service to the equipment.
       3. Contractor shall engage Athena Security prior to start of work.
    3. **warranty & support**
       1. Warranty shall meet the following criteria:
          1. This warranty will cover all cables, terminations, and components provided by the Contractor.
          2. Minimum 4-year written warranty covering workmanship and materials from the date of project completion. All repairs shall be made at no cost to the Owner during the warranty period.
          3. Corrections shall start within 48-hours of notification from Owner.
       2. If the warranty is needed by the Owner within the warranted period and the original installer is no longer in business, system manufacturer shall find a substitute certified contractor and assume costs to fulfill the obligations of the warranty.
       3. Upon acceptance of the warranty paperwork and test results from the Contractor, the system manufacturer will mail a notification letter to the installer and a notification letter with warranty certificate to Owner.
       4. The warranty period shall commence following the final acceptance of the project by the Owner and written confirmation of warranty from the system manufacturer.
       5. Provide a 4-year software service agreement. Include associated licenses and renewal fees for the agreement’s duration. Agreement and licenses shall commence following the project’s substantial completion, and not the Contract’s purchase date.
          1. Support tickets shall be sent to Athena at https://support.athena-security.com/support/tickets/new.
  1. **products**
     1. **x-ray ai system**
        1. System shall have the following characteristics:
           1. Browser-based/mobile dashboard with customizable BI reports.
           2. High-res imaging and real-time detection analytics.
           3. Detects organic/inorganic substances.
           4. AI-assisted screening to reduce false alarms.
           5. Identifies evasion behavior, persons of interest, and prohibited items.
           6. Real-time alert resolution and custom rules.
           7. Voluntary handover & turnaround buttons.
           8. SOC 2 Type II compliant with end-to-end encryption.
           9. SAML2 SSO and enterprise user management support.
           10. Be turnkey and require minimal setup and training for use. ( 15 min or less)
        2. X-ray machine shall have the following characteristics:
           1. Tunnel Size: 19.8"(W) x 11.85"(H)
           2. Conveyor Speed: 8.66 in/s
           3. Conveyor Max Load: 330lbs
           4. Single Inspection Dosage: < 1.32uGy
           5. Max Steel Penetration: 37mm
           6. Be powered via 110VAC, 4A power.
           7. Power Wastage: 1.0 KW (Max)
           8. Noise: <65DB
           9. Operating temperature: 0°F to 113°F [0°C to 45°C]
           10. Storage temperature: -0.4°F to 140°F [-18°C to 60°C]
           11. Relative humidity: 0-95% without condensation
           12. Certifications:

High Performance Network Function

FDA Approval

EU CE Certification

ISO9001 Certification

ISO14001 Environmental Management

* + - * 1. Manufacturer:

Athena Security X-Ray with AI Assist

* 1. **execution**
     1. **GENERAL**
        1. Refer to manufacturer’s guidelines and documentation for installation.
        2. Maintain electrical outlet and EMI clearance.
        3. X-ray machine shall be located within 2-feet of a walkthrough metal detector.
        4. Provide any required screws, anchors, clamps, hook and loop, miscellaneous grounding and support hardware, etc. needed to facilitate the installation of the system.
        5. Furnish any special installation equipment or tools necessary to properly complete the installation.
        6. All techniques and fixtures used in the installation must minimize complexity and must allow for easy maintenance of, and ready access to, all components for test measurements.
     2. **CABLING**
        1. All cable runs must be continuous from the panel to the device location.
        2. Group and bundle all cabling. Do not bundle with other systems.
        3. Device wiring shall be consistent and documented. Color codes shall be uniform.
        4. Cables shall be dressed, bundled, and neatly arranged.
        5. Do not use cable ties or hook and latch tape to secure cable runs to other building systems (such as electrical conduit, EMT, sprinkler pipes, ceiling suspension members, etc.). Staples and drive rings are not allowed.
        6. In areas considered environment air-handling spaces, only use appropriately-listed materials.
     3. **SYSTEM TESTING**
        1. The following tests shall be performed:
           1. Object detection from DHS prohibited items list, organic and inorganic
           2. Full functionality of integrations
           3. GUI configuration
        2. Submit audit logs and proof of all tests.
        3. Submit ticket to Athena Support with closeout report.
     4. **training**
        1. Provide a minimum of (1) 4-hour training session with a minimum of (4) Owner’s staff at the project site (or other location designated by the Owner) by a qualified instructor who is factory certified (presence of equipment necessary because trainees must successfully demonstrate knowledge on a working system). Topics shall include system usage, operation and maintenance, and minor modifications.

**\*\*\*END OF SECTION\*\*\***