Design Requirements: Electronic Security Systems

a. General: As required by regulation, directive, policy, and/or as approved by Directorate of Emergency Services, ICIDS System Administrator (SA) provide survey, design and installation of a complete and fully functioning and tested ICIDS IV system. For MILCON replace ICIDS SA with USACE Seattle District Technical Section. USACE will review approve then submit to ICIDS SA for final design concept approval.

b. The IDS is an Integrated Intrusion Detection System that includes, but is not limited to, one or all of the following intrusion detection components; DAQ Electronics, LLC, Starwatch Security Management Solution (SMS) Remote Area Data Controller (RADC), boundary intrusion (Balance Magnetic Sensor (BMS), Passive Infrared (PIR), Grid-wire, buried sensor cable, fence sensor, line of site detection device, microwave, capacitance sensor) duress, access control, and/or closed circuit television (CCTV). The system to be installed will be fully compatible with the current installation Risk Management Framework (RMF) and DAQ Starwatch SMS architecture and is currently the Department of Army's Integrated Commercial Intrusion Detection System (ICIDS) IV system of record, manufactured by DAQ Electronics, LLC, http://www.daq.net/products/starwatch-sms/, DAQ Electronics, Piscataway Corporate Center, 262B Old New Brunswick Road, Piscataway, NJ 08854 USA.

c. IDS equipment may be government or contractor furnished. Upon receipt of the ICIDS government furnished equipment, for MILCON all labor and materials cost is programed and funded by MILCON funding. Regardless of funding and contract execution office, design must be approved by DES, Security Access Control Branch in advance of any materials acquisition or installation efforts, including pathway. Close coordination between contract PM and DES to ensure pathway integrates with required electronic security system design and equipment placement. Contract PM shall ensure that all work that includes dis-connecting, connecting, terminating, programming, device testing, system testing of any security device, component, equipment that reports an alarm signal will be completed by an ICIDS IV, DAQ Starwatch certified integrator, http://www.daq.net/corporate/var-list/. DES will require validation by presentation of DAQ certification certificates for installing technicians.

d. The ICIDS IV shall use the latest software or firmware for the DAQ Starwatch SMS operating environment ensuring all software and hardware are within the boundaries of the current RMF/ATO. ESS communication pathway shall be IAW above regulatory references, encrypted, and carried over the installation assigned security VLAN. At the time of VLAN programming or connection, the contract PM will request the correct VLAN to be assigned and network switch configuration. DC power backup, generator backup, and/or uninterrupted power supply capabilities shall be provided IAW above applicable reference. Generator backup alone does not meet the definition of Uninterruptable Power Supply (UPS). Uninterruptable power supply is defined as "A device that provides instantaneous battery backup when the electrical power fails or drops to an unacceptable voltage level resulting in a spike or momentary interruption resulting in disruption of the devices normal operation". When not required by regulation, every effort should be made to place Electronic Security Systems (ESS) on a generator backup or UPS circuit when available.

e. Survey, design, installation, programming, and testing will be completed by a DAQ Starwatch SMS certified integrator to include programming component input/output, device connections and terminations, device communication configuration, updating the ICIDS IV topography, determining fields of view and/or alarm zone programing for CCTV and/or boundary intrusion points, and final programming of the software front end account (zones & graphic mapping) located at the ICIDS IV CMS. DES will assist the contract PM with access to the CMS upon request.

f. To reduce system compatibility problems and maintain the integrity and security of the ICIDS IV architecture, the security contractor completing the work must meet the following requirements, and those requirements must be incorporated into any contract for ICIDS IV services:
    - DAQ Starwatch Certified (requires proof of certification)
    - Minimum of 5 years' experience on similar sized system
    - Company Secret security clearance
    - Security Contractor lead PM and System Programmers cleared to Secret
    -

g. The following are requirements to be provided to DES ten working days prior to scheduling of final government acceptance:
    - 10 business day notice for scheduling Government Performance Acceptance Testing
    - Contractor Verification (printed) test results seven days prior to scheduling Government Acceptance Testing.
    - Written notification of successful 3 day system burn in resulted in zero power or communications deficiencies or anomalies.
    - Copy of drawing/blueprints showing configuration at time of acceptance and IAW drawing/blueprint submittals requirements below.

h. All drawings/blueprints shall be numbered, scaled, indicate device height from ground, power/data will be independently color coded, identify type of power, complete communication and power pathway from RADC to first network switch and breaker panel and breaker number, network switch and panel location, switch number, port number supporting ESS, include the following data:
    - Cover Page will indicate Project FY, Project Name, Project Number, Contract Number, Building and Room Number, Company Name of General, Electrical, and additional Sub-Contractors completing any ESS work and index/nomenclature of all included drawing/blueprint pages, job details block identifying by last name, first initial DoR, Project PM, Project QA, Lead Installer, and date.
    - Page 2 will show location of project.
    - Additional Pages will include, general notes, index of symbols, security plan overview, by room, floor, wing to include separate plan for above ceiling or below floor, device name, device type(s), device quantities, device details, RADC details, panel details, panel elevations, and system connection details.

i. All design work shall be reviewed and approved by Joint Base Lewis-McChord Directorate of Emergency Services, ICIDS SA or their representative. All new construction installations, remodel and retrofit work requires design review, inspection, and acceptance by the Joint Base Lewis-McChord ICIDS SA. All acceptance testing shall be coordinated, scheduled, and attended with the ICIDS SA, and will include, ESS lead installer, lead sub associated with ESS work, prime contractor representative, USACE PM or their representative, and end user as applicable. ** *For MILCON replace ISCIDS SA with USACE Seattle District Technical Section.*

j. Final acceptance testing must be scheduled 10 business days prior to day of testing. At time of scheduling a drawing package with system design as to be tested will be provided to the ICIDS SA, if MILCON to the USACE Seattle District Technical Section.

k. An O&M submittal shall be provided to the ICIDS SA at the time of acceptance and will include 1 (ea) hard copy and one digital format. Digital drawings will be provided in .pdf format. O&M submittal shall include the following data: (** For MILCON replace ISCIDS SA with USACE Seattle District Technical Section).

- Cover Page: Project FY, Project Number, Contract and/or Contract Mod Number, Building and/or Room Number, Name of General, Electrical and Security Contractors.
- Page 2: Index for Tabs.
- Page 3: Project Description and Location.
- Page 4: Equipment List, Component Description, Manufacturer, Make, Model, Part Number and Quantity.
- Page 5: Component Data Cut sheets. Cut sheets that describe multiple makes/models, make/models applicable to the project shall be identified with a check mark and make/models not used will be crossed out.
- Page 6: Preventative Maintenance schedule and maintenance points.
- Page 7: Safety Risks and/or hazards
- Page 8: Contractor verification test results indicating successful test and showing results of each device tested.
- Page 9: Contractor Certifications for all ESS contractors conducting install, design, or testing.
- Page 10: Final 100% red line drawings, (minimum 11x17) IAW section (h) above, 1 (ea) hard and (pdf) digital copy.
- Page 11: Signed PVT test sheets by testing contractor.

** For MILCON projects replace DES with USACE Technical Section for review and approval prior to installation or pathway. USACE Technical Section will coordinate submittal reviews with DES ICIDS SA. DES SA will approve or disapprove design and coordinate additional RFIs with USACE Tech Sect.