

**SIRP-00X-00X**  
**Rev 0**  
**R&A Number: XXXXX**



## **Statement of Work**

# **Y-12 National Security Complex Security Infrastructure Revitalization Program Project – Combination Inspector**

**June 28, 2021**

**Prepared for**  
Engineering Supplier  
by Sandia National Laboratories' Physical Security Center of Excellence (PSCOE)

Revision History

## Revision History

Revision Date	Approved By	Change/Comment
## 2021		Original document.

## Acronyms and Abbreviations

CAD	computer-aided drafting
CNS	Consolidated Nuclear Security, LLC
ECF	Entry Control Facility
ENS	Emergency Notification System
FDB	field distribution box
ft	foot
GPR	ground penetrating radar
HVAC	heating, ventilation, and air conditioning
kV	kilovolt
LEED	Leadership in Energy and Environmental Design
PIDAS	perimeter intrusion detection and assessment system
PSCOE	Physical Security Center of Excellence
SDR	Sandia delegated representative
SIRP	Security Infrastructure Revitalization Program
SME	subject matter expert
SOW	Statement of Work
V	volt

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## Introduction

The Y-12 SIRP Quadrant 1, Quadrant 2, and Vehicle Barrier project involves the following summary elements. The perimeter intrusion detection and assessment system (PIDAS) is an existing system at the Y-12 National Security Complex, which is a government-owned facility located in Oak Ridge, Tennessee, and managed by Consolidated Nuclear Security, LLC (CNS) for the Department of Energy (DOE). National Technology and Engineering Solutions of Sandia, LLC (NTESS) is the engineering design agent and construction manager (CM) for the Y-12 SIRP effort. The Quadrants 1 and 2 portion of the project involves the replacement of the PIDAS, and the vehicle barrier portion of the project involves the installation of a continuous passive vehicle barrier alongside the inner PIDAS fence. Elements of the project include:

- Complete replacement and refurbishment of PIDAS components, including installation of a new security trench, and a vehicle barrier system.
- Modifying the primary access point for both pedestrians and vehicles onsite at Portal 8.
- Installation of a fiber optic backbone to support the project's infrastructure.
- Communications and routing tie ins to the Central Alarm Station (CAS) and Secondary Alarm Station (SAS) Installation.
- Erosion Prevention and Sediment Control.
- Managing waste in accordance with the Y-12 SIRP Waste Management Plan.

## General Scope of Work

The Subcontractor shall provide on-site inspector(s) who will be tasked by NTESS with the following responsibilities in order to meet project specific ES&H and QA requirements delineated in *Environment, Safety, and Health Plan for the Security Infrastructure Revitalization Program, Including Construction Contracts for Sandia Work at Y-12* and *Y-12 National Security Complex Security Infrastructure Revitalization Program Quality Assurance Plan* incorporated by reference:

- Overseeing construction work in progress and assisting Sandia Delegated Representatives (SDRs) with contract compliance and work acceptance.
- Providing oversight in accordance with the SIRP ES&H and QA plans.
- Understanding design plans and drawings and specifications.
- Performing field observations and being knowledgeable in disciplines relevant to this project. Preparing observation reports that document the progress, quality, and safety of construction work and other pertinent construction information.

## General Scope of Work

- Providing Subject Matter Expert (SME) observations across geographic areas in an area of expertise (i.e. scaffolding, trenching, lightning protection, etc.).
- Providing mandatory code inspections for compliance with building codes (e.g. IBC, NFPA, etc.) and specialized inspections for contract compliance.
- Ensuring Construction Technical Request for Information (RFIs), submittals and red lines are incorporated by the construction subcontractors.
- Assisting construction subcontractors in obtaining permits and assure permit requirements are met.
- Coordinating construction activities (e.g. utility outages).
- Identify and resolve construction and safety issues and report concerns to SDRs and the Construction Safety department.
- Assisting in construction site safety reviews and issuing safety observations and non-compliance documentation to the Construction Safety department.
- Assisting with random safety inspections for compliance with Occupational Safety and Health Administration (OSHA), 10 Code of Federal Regulations (CFR) 851 standard and NFPA 70E and reporting these to the SDR.
- Performing final inspections/punch lists of construction projects.
- Participating in reviews of NTESS FMOC Standards and Specifications.
- Verifying that construction and service subcontractors have a completed Facilities Asbestos Implementation Team (FAIT) Asbestos Work Release assessment where applicable before the start of work.
- Coordinating various field tests.

## General Scope of Work

### Deliverables

At a minimum, the Subcontractor shall provide the following deliverables (dependent upon specific individual project requirements):

- Design review forms.
- Required permits and outage requests checklists.
- Construction issues and deficiencies logs.
- Daily/weekly inspection reports with photos.
- Code compliance checklists

### Required Qualifications

At a minimum, the Subcontractor supplied Inspector shall have the following qualifications. One person may fill both roles if the person meets the qualifications for both ES&H and QA:

#### ES&H

- More than one current license/certification in the discipline that he/she is performing work.
- Minimum of five (5) years' experience in reading and interpreting construction drawings and specifications, including applicable codes and standards, for institutional and industrial facilities.
- Ability to obtain and maintain a Department of Energy (DOE) Q clearance.
- Knowledge and application of OSHA 20 CFR 1926 Construction Standards.
- Completed OSHA 10-hour training.
- Have completed the 8 hour Tennessee Erosion Prevention and Sediment Control Training and Certification Program for erosion prevention and sediment control for ground disturbance of one (1) acre or more in size
- Knowledge of Behavior Based Safety procedures and construction practices.

#### QA

- Ability to obtain and maintain a Department of Energy (DOE) Q clearance.
- Knowledge and application of DOE O 414.1D, Quality Assurance.

## **Communication Plan**

The Subcontractor provided Inspector(s) shall be responsible for providing PSCOE with periodic (at least weekly, but more often if necessary to convey important information) updates as required via email on the status of each deliverable outlined in the SOW, in addition to any standing meetings, support meetings and site surveys as needed at Y-12 in Oak Ridge, Tennessee.

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