PRIP Plant Prospectus for Proposed Construction

Project Name: UCIC-MCX New Lab / Office Facility

Congressional District: Missouri's 7th Congressional District

District: SWL

Office Symbol: CESWL- UCIC

Project Summary.

The U.S. Army Corps of Engineers (USACE) proposes the design and construction of the new Critical Infrastructure Cyber Security - Mandatory Center of Expertise (UCIC-MCX) in Branson, MO to fill an urgent need for a secure SCADA lab, nine additional individual offices (to total thirteen for the UCIC-MCX), a conference room to hold approximately twenty people, a security system hub for the facility, break room and new Americans with Disabilities Act (ADA) compliant restrooms. Other work items for this project include: connecting an existing generator to the new facility, relocating existing overhead power lines, adding site lighting, and adding a new sewer line to connect to the city sewer system. USACE will design and construct the new building and related site improvements to meet the space needs of the UCIC-MCX for the foreseeable future. There is no other feasible option to address material cybersecurity weaknesses in USACE systems and facilities identified in a Department of Defense (DoD) Inspector General Audit. Therefore, USACE respectfully requests legislation that would authorize the use of funds available in the USACE revolving fund established under 33 U.S.C. § 576 to design and construct the proposed new facility and related site improvements.

Funding

(Site, Design, Construction, Management & Inspection) $5,956,404

Overview of Project.

The UCIC-MCX is a team of subject matter experts responsible for protecting the control systems of national critical infrastructure owned and operated by USACE from cyber threats. By combining subject matter expertise in the areas of control system operation and security, IT security engineering, physical security, and risk management programs, the UCIC-MCX team possesses the unique and necessary skill set required to assess and secure a control system while still maintaining the system's reliability and functionality. This powerful blend of expertise has enabled the UCIC-MCX to spearhead the national effort of securing USACE's critical infrastructure control systems and has propelled the team into becoming recognized experts within, as well as outside of, DoD.

PRIP Plant Prospectus for Proposed Construction

Project Name: UCIC-MCX New Lab / Office Facility

Congressional District: Missouri's 7th Congressional District

Since 2013 when USACE created the UCIC-MCX, the scope of the mission has increased incrementally year after year and, in turn, space needs have increased to accommodate additional mandatory personnel and larger lab requirements. As a result of DoD Inspector General Audit 2014-037, which identified material cybersecurity weakness in USACE systems and facilities, the UCIC-MCX began to report quarterly on the progress of the required lab development and documented the various obstacles that delayed full mission capability, to include significant limitations due to lack of available space and power requirements. Today, the National SCADA Test Lab at the UCIC-MCX is the central hub of all UCIC-MCX cybersecurity solutions and the need for more full-time employee has expanded. The UCIC-MCX operates partly out of a pre-fabricated structure renovated in FY16 that houses the administrative offices, restrooms and a kitchen/break room. The SCADA Lab is currently located off-site in borrowed space at the USACE Table Rock Project Office nearby. Security for the UCIC-MCX at these locations is gravely lacking and it is imperative that all elements of the UCIC-MCX be relocated to one site behind a secure fence & gate. The proposed, approximately 5,000 sq ft new building will provide space for the UCIC-MCX's SCADA lab, nine more individual offices (to total thirteen for the UCIC-MCX), a conference room to hold approximately twenty people, a security system hub for the facility, a break room, and new ADA compliant restrooms.

Other work items for this project include: connecting an existing generator to the new facility, relocating existing overhead power lines, adding site lighting, and adding a new sewer line to connect to the city sewer system.

Site Information

To Be Acquired [new construction only]..... N/A acres

Building Area[1]

Proposed Project

Gross square feet (excluding inside parking) ..... 5,000 gsf

Gross square feet (including inside parking) ..... 5,000 gsf

Inside parking spaces 0

PRIP Plant Prospectus for Proposed Construction

Project Name: UCIC-MCX New Lab / Office Facility

Congressional District: Missouri's 7th Congressional District

Building Area

Current Project

Gross square feet (excluding inside parking) ..... 1,711 gsf

Gross square feet (including inside parking) ..... 1,711 gsf

Inside parking spaces 0

Estimated Project Budget.

Estimated Site ..... $150,000[2]

Estimated Design $403,824

Estimated Construction Cost (ECC) (including inside parking) ….. $4,897,800

Estimated Management and Inspection (M&I) $504,780

Estimated Total Project Cost (ETPC) ..... **$5,956,404[3]**

Schedule	**Start**	**Stop**
Design and Construction	FY 2020	FY 2022

[1] Square footages are approximate. The project may contain a variance in gross square footage from that listed in this prospectus.

[2] Potential site funds needed for relocation, unknown sub-surface conditions, environmental, and archaeological risk mitigation.

[3] USACE requests approval for a total project cost. As noted in the estimated project budget above, sub-totals comprising the estimated project budget are intended to provide a breakdown in support of the ETPC. The actual total cost to perform the entire project may differ from what is represented in this prospectus by the various subcomponents.

Justification.

A DoD Inspector General audit in 2014 identified material cybersecurity weaknesses in USACE systems and facilities. The cybersecurity weaknesses identified in the audit cannot be adequately addressed without constructing the proposed facility to house the National SCADA Test Lab, which will enable the UCIC-MCX to more effectively test security patches, upgrades, and other security systems using identical physical equipment replicas and virtual images of fielded systems. Most USACE control systems do not currently have this capability, so development of the lab is required to address the audit findings and ensure that USACE national critical infrastructure is protected from the increasing threat of cyber-attacks. USACE has informed the DoD Inspector General of its proposed course of action to construct the new facility, which the Inspector General has accepted as an appropriate method to address the negative audit findings. The National SCADA Test Lab is the central hub of all UCIC-MCX cybersecurity solutions, and it is critical to the security of national critical infrastructure that the UCIC-MCX is provided an adequate and secure environment to conduct USACE cybersecurity operations efficiently and effectively.

As mentioned in the overview section, currently, UCIC-MCX operates partly out of a secondhand construction pre-fabricated building (renovated in FY16) and partly out of borrowed space at the Table Rock Project Office, both located in Branson, MO. The UCIC-MCX has struggled to maintain the cohesiveness necessary for a cybersecurity operation in this physically fragmented state, and in order to operate at the proper level of security needed for this mission, it is imperative and immediate that all elements of the UCIC-MCX be relocated to one site behind a secure fence & gate.

The existing renovated pre-fab building, will remain in use at the site as additional office space and will remain in service during the construction of the new building. The total square footage of this existing space is 1,711 sq ft, which currently houses a kitchen/break room, men's and women's restrooms, a small computer room for group work, offices for the Director and Deputy Director, and four of the total thirteen offices that are needed. The approximately 5,000 sq ft new building will provide space for the UCIC-MCX main SCADA lab (currently operated off-site), nine to ten more offices, a conference room to hold twenty people, a security system hub for the facility, a SCIF, and a new Director's office that complies with requirements to contain and protect classified information.

Other work items for this project include: connecting an existing generator to the new facility, relocating existing overhead power lines, adding site lighting, and adding a new sewer line to connect to the city sewer system

In Branson, where the bulk of UCIC-MCX's specialized workforce is located, there is no other suitable space owned by the Federal Government available to house the UCIC-MCX. It is economically more feasible to build a new building that appropriately responds to all of the required specifications at the current site where it can be connected with the existing elements already in progress (i.e., security fence, generator, existing office space) than any other option.

Alternatives Considered (See also, Economic Analysis attached)

Status Quo (Current Operations) – Current space is fully utilized. There is no additional capacity to expand/construct necessary computer labs or offices to accommodate current and end state requirements for the UCIC-MCX.

Renovation/New Construction Mix – The preferred solution is a mix of renovation and construction. Renovation of an existing construction office has been completed. To increase space to full operation needs, a new structure needs to be constructed next to the existing facility to provide a protected and secure set of connected buildings that will house the entire UCIC-MCX in a single campus within a protected compound and segregated from the current hydropower project, which has a different mission. The UCIC-MCX will continue to utilize a physical campus with virtual employees to maximize the cybersecurity mission.

Leasing – Springfield, MO does not have federal lease space capacity to accommodate the UCIC-MCX. There is no government leased space in Branson. Commercial lease space in Branson, based on lead time and intelligence/cybersecurity facility mandates, is not practicable.

Other Facilities on Base/Installation: No vacant Table Rock Lake project facilities are available or authorized to meet the UCIC-MCX requirement.

Space Requirement of the New UCIC-MCX Bldg Branson, MO

	Current		Proposed	
Component	Personnel	Equipment	Personnel	Equipment
SCADA Lab	02	20	04	52
Individual Offices	06	18	16	48
Total	08	38	20	100

PRIP Plant Prospectus for Proposed Construction

Project Name: UCIC-MCX New Lab / Office Facility

Congressional District: Missouri's 7th Congressional District

Summary of Energy Compliance.

This project will be designed to conform to applicable environmental and energy statutes, regulations, and Executive Orders and will implement strategies to meet the Guiding Principles for High Performance and Sustainable Buildings. USACE encourages design opportunities to increase energy and water efficiency above the minimum performance criteria.

Certification of Need:

The proposed project is the best solution to meet a validated Government need.

Recommended: COPELAND.PHILLIP.L.1297530689 Digitally signed by COPELAND.PHILLIP.L.1297530689 Date: 2020.01.13 09:48:14 -06'00'

PHILLIP L. COPELAND, Director
USACE Critical Infrastructure Cybersecurity Mandatory Center of Expertise

Approved: NOE.ERIC.MICHAEL.1112349886 Digitally signed by NOE.ERIC.MICHAEL.1112349886 Date: 2020.01.13 16:57:56 -06'00'

ERIC M. NOE
Colonel, EN
Commanding