

**PROSPECTUS – ALTERATION  
JAMES A. BYRNE U.S. COURTHOUSE  
PHILADELPHIA, PA**

Prospectus Number:       PPA-0278-PH20  
Congressional District:       03

**FY2020 Project Summary**

The General Services Administration (GSA) proposes a repair and alteration project for the James A. Byrne U.S. Courthouse (Byrne USCH), located at 601 Market Street in Philadelphia, PA. The proposed project will upgrade the heating, ventilation and air conditioning (HVAC) system, which includes comprehensive repairs or replacement of obsolete air handling units and degraded ductwork, the installation of enhanced controls and related electrical and life safety upgrades.

**FY 2020 Committee Approval and Appropriation Requested**

**(Design, Construction, and Management & Inspection).....\$58,855,000**

**Major Work Items**

HVAC upgrades/replacement, electrical upgrades, life safety upgrades, interior construction, and demolition

**Project Budget**

Design .....	\$5,225,000
Estimated Construction Cost (ECC).....	49,640,000
Management & Inspection (M&I).....	3,990,000
<b>Estimated Total Project Cost (ETPC) .....</b>	<b>\$58,855,000</b>

\*Tenant agencies may fund an additional amount for alterations above the standard normally provided by GSA.

**Schedule**

	<b>Start</b>	<b>End</b>
Design and Construction	FY 2020	FY 2026

**Building**

The Byrne USCH, along with the adjoining William J. Green, Jr. Federal Building, is part of a 1.7-million gross square foot (GSF) Federal complex in downtown Philadelphia, known as the Byrne-Green Complex. It is the largest federally owned complex in GSA's inventory in the Philadelphia area. The Byrne USCH, which comprises approximately 860,000 GSF, was designed along with the Green Federal Building to share common mechanical systems. The first floors are linked by a common circulation area, which includes a ceremonial courtroom and plaza. The complex also shares an underground parking garage.

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**Tenant Agencies**

Judiciary – Court of Appeals and District Court; Department of Justice – Federal Bureau of Investigation and U.S. Marshals Service; GSA

**Proposed Project**

The project proposes to upgrade the deficient HVAC system. The project will replace the air handling units that are in very poor condition. Portions of the HVAC distribution system will be upgraded to a variable air volume network and the existing perimeter heating systems will be balanced with the new distribution network to enhance control, optimize efficiency and improve tenant comfort. Ductwork will be replaced or comprehensively repaired to mitigate additional damage that has already caused blockages and air leaks. Condensing boilers will be added to the common mechanical plant to provide hot water for reheat coils in the variable air volume devices. The energy management system (EMS) will be upgraded to integrate the controls for all HVAC components and incorporate control points for all building systems.

Electrical and life safety upgrades will be implemented, where required, resulting from HVAC component upgrades and distribution network changes. Demolition will be required to access the required components being replaced or upgraded. Some asbestos abatement will be required in mechanical spaces and around ductwork.

**Major Work Items**

HVAC Upgrades/Replacement	\$39,940,000
Electrical Upgrades	4,220,000
Life Safety Upgrades	1,895,000
Interior Construction	1,815,000
Demolition	<u>1,770,000</u>
<b>Total ECC</b>	<b>\$49,640,000</b>

**Justification**

The Byrne USCH supports the operations of the U.S. Court of Appeals for the Third Circuit and the U.S. District Court for the Eastern District of Pennsylvania. A majority of the HVAC system components are original to the building and past their useful lives. The air handling unit casings are in very poor condition, with condensate leaking, corrosion, and air leakages, thereby reducing energy efficiency and increasing operating costs. The ductwork is damaged, causing further air leakage and reduced energy efficiency. The duct lining has significant fraying, which has led to obstructions, energy

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inefficiency, and tenant comfort issues. Current control constraints limit overall system effectiveness, with the EMS using outdated technology and with perimeter and interior HVAC systems inadequately connected to the EMS.

Given the condition of the existing HVAC system, there is increasing risk for system failure and outage to portions of floors. These failures would lead to a significant disruption to the Judiciary's ability to meet caseload requirements. If tenant agencies were forced to relocate due to a system failure or outage, costly leased space would be required because there is no vacancy within the Byrne USCH.

**Summary of Energy Compliance**

This project will be designed to conform to requirements of the *Facilities Standards for the Public Buildings Service*. GSA encourages cost effective design opportunities to increase energy and water efficiency above the minimum performance criteria.

**Prior Appropriations**

None

**Prior Committee Approvals**

None

**Prior Prospectus-Level Projects in Building (past 10 years)**

None

**Alternatives Considered (30-year, present value cost analysis)**

There are no feasible alternatives to this project. This is a limited scope renovation and the cost of the proposed project is far less than the cost of leasing or constructing a new building.

**Recommendation**

ALTERATION

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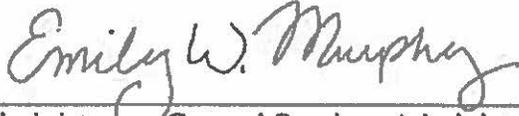
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**Certification of Need**

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

Submitted at Washington, DC, on March 18, 2019

Recommended:   
Commissioner, Public Buildings Service

Approved:   
Administrator, General Services Administration