

**Washington Headquarters Services  
 FY 2020 Military Construction, Defense-Wide  
 (\$in Thousands)**

(\$ in Thousands)

<u>State/Installation/Project</u>	<u>Authorization Request</u>	<u>Approp. Request</u>	<u>New/ Current Mission</u>	<u>Page No.</u>
<b>Virginia</b>				
Pentagon				
Control Tower and Fire and Day Station	20,132	20,132	C	160
Backup Generator	8,670	8,670	C	164
<b>Total</b>	<b>28,802</b>	<b>28,802</b>		

<b>1. COMPONENT</b> DEF (WHS)		<b>FY 2020 MILITARY CONSTRUCTION PROGRAM</b>					<b>2. DATE (YYYY MMDD)</b> MAR 2019				
<b>3. INSTALLATION AND LOCATION</b> Pentagon, Arlington, VA				<b>4. COMMAND</b> OSD/CMO/WHS			<b>5. AREA CONSTRUCTION COST INDEX</b> 1.07				
<b>6. PERSONNEL</b>		(1) PERMANENT			(2) STUDENTS			(3) SUPPORTED			(4) TOTAL
		OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	OFFICER	ENLISTED	CIVILIAN	
b. AS OF 2018-09-30											27488
b. END FY23											27488
<b>7. INVENTORY DATA (\$000)</b>											
a. TOTAL ACREAGE (acre)										0.00	
b. INVENTORY TOTAL AS OF YYYYMMDD										0.00	
c. AUTHORIZATION NOT YET IN INVENTORY										0.00	
d. AUTHORIZATION REQUESTED IN THIS PROGRAM										28,802.00	
e. AUTHORIZATION INCLUDED IN FOLLOWING PROGRAM										0.00	
f. PLANNED IN NEXT THREE PROGRAM YEARS										0.00	
g. REMAINING DEFICIENCY										0.00	
h. GRAND TOTAL										28,802.00	
<b>8. PROJECTS REQUESTED IN THIS PROGRAM</b>											
a. CATEGORY						b. COST (\$000)	c. DESIGN STATUS				
(1) CODE	(2) PROJECT TITLE			(3) SCOPE			(1) START	(2) COMPLETE			
73010	Control Tower Fire Day Station			8,617 SF		20,132	09/2018	07/2019			
81160	Backup Generator			NA		8,670	09/2018	06/2019			
<b>9. FUTURE PROJECTS</b>											
813	Modernize Switch House 1			Electrical Switch Station 50 KVA Building Expansion 1104 SF		\$14,379					
822	HRP Condensing Water Outfall			Improve Outfall 2 1510 LF New Outfall 3 1610 LF		\$10,400					
125	Construct Fuel Pipeline					\$8,133					
<b>10. MISSION OR MAJOR FUNCTIONS</b>											
The Pentagon serves as the Nation's military command center providing critical command and control and support functions to the Department of Defense (DoD) and its subordinate commands with 6.5 million square feet of office, support and quality of life space.											
<b>11. OUTSTANDING POLLUTION AND SAFETY DEFICIENCIES</b>											
										(\$000)	
A. Air Pollution										0	
B. Water Pollution										0	
C. Occupational Safety and Health										0	

1. COMPONENT  WHS		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE  MAR 2019	
3. INSTALLATION AND LOCATION Pentagon Arlington, VA			4. PROJECT TITLE Control Tower and Fire Day Station			
5. PROGRAM ELEMENT		6. CATEGORY CODE  730 10	7. PROJECT NUMBER  92232		8. PROJECT COST (\$000)  20,132	
9. COST ESTIMATES						
ITEM		UM	QUANTITY	UNIT COST	COST(\$000)	
PRIMARY FACILITY					15,553	
73010 Fire Day Station		SF	6,329	680	(10,631)	
13310 Air Traffic/Flight Control Tower		SF	2,278	641	(3,738)	
73010 Temporary Facilities		LS	--	--	(1,184)	
SUPPORTING FACILITIES					1,925	
Electric Service		LS	--	--	(171)	
Water, Sewer, Gas		LS	--	--	(185)	
Paving, Walks, Curbs And Gutters		LS	--	--	(235)	
Storm Drainage		LS	--	--	(66)	
Site Imp(303) Demo(939)		LS	--	--	(1,242)	
Information Systems		LS	--	--	(26)	
ESTIMATED CONTRACT COST					17,478	
CONTINGENCY (5.00%)					874	
SUBTOTAL					18,352	
SUPERVISION, INSPECTION & OVERHEAD (5.70%)					1,046	
DESIGN/BUILD - DESIGN COST (4.0000%)					734	
TOTAL REQUEST (ROUNDED)					20,000	
TOTAL REQUEST					20,132	
EQUIPMENT FROM OTHER APPROPRIATIONS(NON ADD)					(999)	
10. Description of Proposed Construction						
Construct a permanent combined Control Tower and a Fire Day Station. This facility will include apparatus bays, administration areas, day training areas, equipment maintenance areas, fitness room, control tower and associated equipment rooms, vehicle exhaust removal system, information systems, fire protection and alarm systems, and an Energy Monitoring Control Systems (EMCS) connection.						
Supporting facilities include site development, utilities and connections, lighting, paving, parking, walks, curbs and gutters, storm drainage, information systems, landscaping and signage. Heating and air conditioning will be provided by a self-contained system.						
Facilities will comply with Antiterrorism Force Protection (AT/FP) regulations.						

1. COMPONENT  WHS	FY 2020 MILITARY CONSTRUCTION PROJECT DATA		2. DATE  MAR 2019
3. INSTALLATION AND LOCATION Pentagon Arlington, VA		4. PROJECT TITLE Control Tower and Fire Day Station	
5. PROGRAM ELEMENT	6. CATEGORY CODE  730 10	7. PROJECT NUMBER  92232	8. PROJECT COST (\$000)  20,132
<p>10. Description of Proposed Construction (Continued)...</p> <p>Low Impact Development and Chesapeake Bay Preservation Act pollutant reduction features will be included as appropriate.</p> <p>Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.</p>			
<p>11. REQ:            8,757 SF                    ADQT:                    NONE                    SUBSTD:                    NONE</p> <p>PROJECT: Construct a Control Tower and Fire Day Station. (Current Mission)</p> <p>REQUIREMENT: The Control Tower and Fire Day Station require permanent fire department and air traffic controller facilities to support the enduring Pentagon Helipad mission. Personnel and equipment are required to meet the Department of Defense (DoD) response time for emergency situations to the helipad. The Aircraft Rescue and Firefighting equipment response time is one minute or less for equipment which is "pre-positioned" near aircraft operations.</p> <p>The Fire Day Station requires additional climate controlled space to store and maintain equipment, train personnel, and provide required physical training and locker rooms. Space is also required to garage two supporting vehicles.</p> <p>The Control Tower requires a direct line-of-sight to the helipad and sufficient working space for the controllers.</p> <p>CURRENT SITUATION: All of the facilities currently in use are temporary and were placed on the site following the terrorist attacks at the Pentagon on September 11, 2001. The previous facilities were destroyed in the terrorist attack. The existing temporary air traffic control facility is minimally sized and lacks adequate working space for the controllers. Additionally, there is no direct line-of-sight to the helipad, which has resulted in a video camera and monitor being used to provide situational awareness and viewing of the landing of aircraft.</p> <p>The fire station only has room for one apparatus with the second remaining outside and susceptible to the elements, shortening its useful life. This bay is also used for the fitness room and equipment maintenance. The equipment storage area is not climate controlled. The apparatus bay also does not have a clear path to the helipad.</p>			

1. COMPONENT  WHS	FY 2020 MILITARY CONSTRUCTION PROJECT DATA		2. DATE  MAR 2019				
3. INSTALLATION AND LOCATION Pentagon Arlington, VA		4. PROJECT TITLE  Control Tower and Fire Day Station					
5. PROGRAM ELEMENT	6. CATEGORY CODE  730 10	7. PROJECT NUMBER  92232	8. PROJECT COST (\$000)  20,132				
<p>CURRENT SITUATION: (Continued)...</p> <p>The administrative, training, and kitchen areas for both facilities are trailers. The day room does not exist. There are no showers for any staff within the temporary facilities. The current facilities are operating under a waiver and temporary usage permit. These were originally approved in 2004 and are now renewed on an annual basis.</p> <p>IMPACT IF NOT PROVIDED: The fire department and air traffic control personnel will continue to operate out of temporary trailers that are not in accordance with modern fire station and air traffic control design and mission needs. Lack of a climate controlled equipment storage and maintenance space leads to degradation of the equipment and additional operational expenses. Failure to fund this project will result in slower response times. The fire department will not be able to house equipment needed to adequately respond in case of an incident at the helipad. The Air Traffic Controllers will continue to view the helipad by video cameras and monitors and work in space that is inadequate as opposed to having a clear and direct line-of-sight.</p> <p>ADDITIONAL: Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in accordance with Executive Order 11988.</p> <p>This project has been coordinated with the installation physical security plan and all physical security measures are included. All required antiterrorism protection measures are included.</p> <p>Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement.</p> <p>The Department of Army provides the air traffic controllers and fire fighter services for this mission.</p>							
<p>12. SUPPLEMENTAL DATA:</p> <p>A. Estimated Execution Data:</p> <p>(1) Acquisition Strategy: Design-build</p> <p>(2) Design Data:</p> <table data-bbox="292 1764 1524 1837"> <tr> <td>(a) Design or Request for Proposal (RFP) Started.....</td> <td style="text-align: right;"><u>SEP 2018</u></td> </tr> <tr> <td>(b) Percent of Design Completed as of JAN 2019.....</td> <td style="text-align: right;"><u>15</u></td> </tr> </table>				(a) Design or Request for Proposal (RFP) Started.....	<u>SEP 2018</u>	(b) Percent of Design Completed as of JAN 2019.....	<u>15</u>
(a) Design or Request for Proposal (RFP) Started.....	<u>SEP 2018</u>						
(b) Percent of Design Completed as of JAN 2019.....	<u>15</u>						

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5. PROGRAM ELEMENT	6. CATEGORY CODE  730 10	7. PROJECT NUMBER  92232	8. PROJECT COST (\$000)  20,132
12. SUPPLEMENTAL DATA: (Continued)...			
A. Estimated Execution Data:			
(c) Design or RFP Complete.....			JUL 2019
(d) Total Design Cost.....			652
(e) Energy Study and/or Life Cycle Cost Analysis performed?			YES
(f) Standard or Definitive Design Used?.....			NO
(3) Construction Data:			
(a) Contract Award.....			MAR 2020
(b) Construction Start.....			AUG 2020
(c) Construction Complete.....			MAR 2022
B. Equipment associated with this project which will be provided from other appropriations:			
Equipment Nomenclature	Procuring Appropriation	Fiscal Year Appropriated Or Requested	Cost (\$000)
Fire Station Furnishings	OMA	2021	950
Electronics (TV, Projector, et Appliances	OMA	2021	15
Info Sys - ISC	OPA	2021	25
			9

1. COMPONENT WHS		FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE MAR 2019	
3. INSTALLATION AND LOCATION Pentagon Arlington, VA			4. PROJECT TITLE Backup Generator			
5. PROGRAM ELEMENT		6. CATEGORY CODE 811 60	7. PROJECT NUMBER 91531		8. PROJECT COST (\$000) 8,670	
9. COST ESTIMATES						
ITEM		UM	QUANTITY	UNIT COST	COST(\$000)	
PRIMARY FACILITY					7,022	
81160 Backup Generator		LS	--	--	(225)	
Facility Modification and Expansion		LS	--	--	(6,797)	
SUPPORTING FACILITIES					505	
Site Imp(231) Demo(276)		LS	--	--	(505)	
ESTIMATED CONTRACT COST					7,527	
CONTINGENCY (5.00%)					376	
SUBTOTAL					7,903	
SUPERVISION, INSPECTION & OVERHEAD (5.70%)					451	
DESIGN/BUILD - DESIGN COST (4.0000%)					316	
TOTAL REQUEST (ROUNDED)					8,700	
TOTAL REQUEST					8,670	
EQUIPMENT FROM OTHER APPROPRIATIONS(NON ADD)						
10. Description of Proposed Construction Construct a permanent expansion to the existing Pentagon critical power plant. This facility expansion will include a fix-mounted generator, fuel oil pipelines, a generator room, administration area, associated heating and ventilation, air intake and exhaust systems, information systems, fire protection, security system, fire alarm systems, and Energy Monitoring Control Systems (EMCS) connection. An isolated cast-in-place pad supported on piling will be required for the generator. Facilities will comply with Antiterrorism Force Protection (AT/FP) regulations, the Architectural Barriers Act (ABA), and the Americans with Disabilities Act (ADA). Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.						

1. COMPONENT  WHS	FY 2020 MILITARY CONSTRUCTION PROJECT DATA			2. DATE  MAR 2019
3. INSTALLATION AND LOCATION Pentagon Arlington, VA		4. PROJECT TITLE Backup Generator		
5. PROGRAM ELEMENT	6. CATEGORY CODE  811 60	7. PROJECT NUMBER  91531	8. PROJECT COST (\$000)  8,670	
11. REQ:                      NONE                      ADQT:                      NONE                      SUBSTD:                      NONE				
PROJECT:				
Supply additional power backup to mission critical systems. (Current Mission)				
REQUIREMENT:				
Additional power backup capacity is required to support the current and projected future Pentagon mission critical load as provided by the Pentagon Mission Critical Utilities Working Group. An N+2 redundancy level is required for mission critical loads. The Pentagon was recently reduced from a Title V operating permit to a synthetic minor source. In order to reduce the risk of having to revert to a Title V operating permit, the new generator will be required to have Selective Catalytic Reduction (SCR) to reduce emissions. Expanded facilities and infrastructure are required to support the additional generator.				
CURRENT SITUATION:				
The existing Generator Plant provides on-site power backup to critical loads at the Pentagon. The mission critical load is nearing 80% of the N+2 capacity of the Generator Plant. The existing power generating capacity is not adequate to reliably serve current loads as well as expected growth while maintaining N+2 redundancy. There is no room in the existing power plant for a new generator.				
IMPACT IF NOT PROVIDED:				
The DoD mission critical loads will not have backup power with N+2 redundancy. This condition will result in not meeting the critical backup power capacity established by the Pentagon Mission Critical Utilities Working Group. This reduces the resiliency of the critical power supply at the Pentagon during regional commercial power outages.				
ADDITIONAL:				
Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain per Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. This project is the only feasible option to meet the requirement.				



1. COMPONENT  WHS	FY 2020 MILITARY CONSTRUCTION PROJECT DATA	2. DATE  MAR 2019
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3. INSTALLATION AND LOCATION Pentagon Arlington, VA	4. PROJECT TITLE Backup Generator
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5. PROGRAM ELEMENT	6. CATEGORY CODE 811 60	7. PROJECT NUMBER 91531	8. PROJECT COST (\$000) 8,670
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12. SUPPLEMENTAL DATA:

A. Estimated Execution Data:

(1) Acquisition Strategy: Design-build

(2) Design Data:

(a) Design or Request for Proposal (RFP) Started.....	SEP 2018
(b) Percent of Design Completed as of JAN 2019.....	15
(c) Design or RFP Complete.....	JUN 2019
(d) Total Design Cost.....	440
(e) Energy Study and/or Life Cycle Cost Analysis performed?	NO
(f) Standard or Definitive Design Used?.....	NO

(3) Construction Data:

(a) Contract Award.....	JAN 2020
(b) Construction Start.....	JUN 2020
(c) Construction Complete.....	JAN 2022

B. Equipment associated with this project which will be provided from other appropriations:

<u>Equipment</u>	<u>Procuring</u>	<u>Fiscal Year</u>	<u>Cost</u>
<u>Nomenclature</u>	<u>Appropriation</u>	<u>Appropriated</u> <u>Or Requested</u>	<u>(\$000)</u>