

**NEW MASTER CLOCK FACILITY AND BUILDING REHABILITATIONS AT
U.S. NAVAL OBSERVATORY**

3450 Massachusetts Avenue, NW
Washington, DC 20001

Finding of No Significant Impact

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) Regulations (40 CFR, Parts 1500-1508), and the National Capital Planning Commission's (NCPC) NEPA Regulations, I have evaluated the final site and building plans for the Master Clock Facility and Building Rehabilitations at the U.S. Naval Observatory as shown on NCPC Map File No. 71.20(38.00)44956 and the New Master Clock Facility and Building Rehabilitations Environmental Assessment (EA) prepared by the Department of the Navy, with NCPC as a cooperating agency. The U.S. Naval Observatory Campus is comprised of approximately 72 acres of land and is located in the northwest quadrant of the District of Columbia, approximately one half mile west of Rock Creek, between Massachusetts Avenue and Wisconsin Avenue. The Navy published a Notice of Availability of the Draft EA in *The Washington Times* on February 6, 7, and 8, 2017. The notice described the Proposed Action, solicited public comments on the Draft EA, provided dates of the public comment period, and announced that the EA was available for review. No public comments were received. The EA is incorporated into this Finding of No Significant Impact (FONSI) by reference. Based on the foregoing, I have determined that the Action Alternative (Alternative 1) will not have a significant impact on the human environment and therefore an Environmental Impact Statement will not be prepared.

Purpose and Need

The purpose of the Proposed Action is to provide adequate facilities to house the Master Clocks and support functions in buildings that meet operational requirements. Specifically, the Master Clocks facility provides astronomical data and serves as the official time reference for the Department of Defense (DoD) and, via Global Positioning System (GPS), a standard of time used throughout the United States. Its mission is essential to support the scientific role for the Navy, the DoD, and the nation.

The Proposed Action is needed because the current Master Clocks and related facilities at NSF Naval Observatory are not adequately sized or appropriately outfitted to meet mission requirements. Currently, one of the buildings where the Master Clocks are housed (Building 78) does not meet the requirements for heating, ventilation, and air conditioning (HVAC); has power and communication vulnerabilities; and has ceiling height limitations that make it difficult for staff

to access the clocks for maintenance. There are also several buildings at the NSF Naval Observatory that are not equipped to provide support functions. Depending on the building, renovations are needed to meet electrical, HVAC, and fire protection requirements and antiterrorism force protection (ATFP) standards.

Proposed Action

The Navy is proposing a multiphase construction of a Master Clocks and Operations Facility at the NSF Naval Observatory in Washington, DC. The Proposed Action includes new construction, the renovation and demolition of existing structures, and the addition of approximately 67 personnel. The current mission, including the type of operations, is not expected to change. Construction is expected to begin in the spring of 2020 and end in 2025.

Alternatives

Alternatives were developed for analysis based upon the following screening factors:

- The facility must be able to maintain specific temperature and humidity performance requirements. The temperature range should be within ± 0.1 degree Celsius root mean square (RMS) and humidity should be ± 2 percent of a specific set point.
- The facility must have redundant electrical and HVAC systems. These systems should have the capability of conditioning the entire building if one system fails. Controlling the climate is essential to making sure that the Master Clocks are operating correctly.
- The ceiling must be at least 12 feet, which would be high enough for staff to access the Master Clocks and conduct maintenance.
- The facility must be located near the center of the installation to provide maximum insulation from off-installation noise and vibration.
- Renovations or new construction should minimize, to the extent possible, impacts on cultural resources.

The Navy considered two action alternatives that meet the purpose of and need for the Proposed Action, and a No Action Alternative.

Alternative 1: The Preferred Alternative (Northeast of Building 3) would include construction of a new Master Clocks and Operations Facility (Building 51; approximately 15,000 square feet); renovation of an administrative facility (Building 52), a data-processing center (Building 52A), an observer's electronic lab (Building 3), and a laboratory (Building 78); demolition of a technical equipment storage shed (Building 82); restoration of two historic building foundations (former Buildings 6 and 7); and an increase of approximately 67 personnel. Building 51, the proposed Master Clocks and Operations Facility, would be constructed northeast Building 3. Utility and communications lines would be constructed from Building 51, running northwest and then along the perimeter to existing connections on the northern and side of the installation. Another utility line would run from building 51 southward towards Building 50, then southeast to Observatory Circle NW near the south gate. Communication lines would follow the same general path as the utility lines to connect to the base communications facility southeast of Building 51 and to an

existing off-base communications hub on Wisconsin Avenue NW. In addition, two emergency backup generators (one diesel and one natural gas) and an 8,000-gallon diesel above ground storage tank would be included. New impervious surfaces would include an access road from Goldsborough Avenue and Newcomb Place NW to Building 51, sidewalks, and pads for electrical and HVAC systems. Site improvements would also be constructed, including a stormwater detention dry pond, erosion control, landscaping, concrete ramps, guard rails, and bioretention swales.

Alternative 2: Under Alternative 2, the Proposed Action would be implemented as described for the Preferred Alternative. However, under Alternative 2, Building 51 would be constructed west of Building 78, adjacent to Morgan Lane NW. The utility line would be constructed to the south of Building 51 to an existing connection east of Building 52.

No Action Alternative: Under the No Action Alternative, the Proposed Action would not occur. The Navy would continue to use Buildings 78 and 52A to house the Master Clocks. Building 78 has ATFP, power, and communications vulnerabilities. Building 52A is located near the installation fence line, which is an ATFP and security concern, and does not provide maximum insulation from off-installation noise and vibration. Both facilities are aging and have poor temperature and humidity controls. The No Action Alternative would not meet the purpose of and need for the Proposed Action. However, as required by the Council on Environmental Quality's regulations, the No Action Alternative is carried forward for analysis in this EA and provides a baseline for measuring the environmental consequences of the action alternatives.

Standard for Evaluation

Under NEPA, the Council on Environmental Quality (CEQ) regulations, and NCPC's NEPA Regulations, an EA is sufficient and an Environmental Impact Statement need not be prepared if the EA supports the finding that the major federal action will not significantly affect the human environment. The EA for this project was prepared in accordance with this standard.

Environmental Effects of the Preferred Alternative

The EA examined the potential effects of the Alternative 1 (Preferred Alternative), Alternative 2, and the No Action Alternative on the following resource categories: air quality, water resources, cultural resources, biological resources, noise, infrastructure, public health and safety, and hazardous materials and wastes. The following is a summary of the environmental consequences on the Preferred Alternative.

Air Quality: There would be no significant impacts on air quality. Emissions from construction activities, annual operational activities, and additional commuters would be below *de minimis* and major source thresholds. Therefore, a general conformity determination is not required.

Water Resources: There would be no significant impacts on water resources. There would be negligible impacts on groundwater from the increase in impervious surfaces; indirect, short-term, minor, adverse impacts on surface water as a result of new construction and increased impervious

surface; and no impacts on wetlands or floodplains. New facilities would employ regulation-compliant groundwater and stormwater management practices, as applicable.

Cultural Resources: There would be some adverse impacts on cultural resources due to the addition of an external elevator to historic Building 78. There would be adverse effects on a National Register-eligible historic district, but they are not considered significant. The historic circulation system would be partially demolished. The Navy has had discussions with the District of Columbia Historic Preservation Office, the Commission of Fine Arts, the National Capital Planning Commission, and the Advisory Council on Historic Preservation regarding site layout and design considerations for the proposed building, modification to the other buildings, and landscape elements that are part of this project. An MOA between the Navy and various NHPA Section 106 consulting parties has been executed to handle mitigation for the adverse effects.

Biological Resources: There would be no significant impacts on biological resources. Minor, short-term, adverse impacts from construction noise and dust impacts would occur on wildlife. Minor, long-term, adverse impacts caused by loss of vegetation and subsequent loss of habitat would occur.

Noise: There would be no significant impacts on noise. Minor, short-term, adverse impacts on noise-sensitive receptors would occur during construction, renovation, and demolition activities. **Infrastructure:** There would be no significant impacts on infrastructure. Long-term, beneficial impacts would result from updating and improving utilities and facilities.

Public Health and Safety: There would be no significant impacts on public health and safety. Long-term, beneficial impacts would result from fire protection systems being upgraded and existing structures being renovated using ATFP-compliant standards.

Hazardous Materials and Wastes: There would be no significant impacts on hazardous materials and wastes. Special hazards (i.e., ACMs, LBP, PCBs, CFCs, radon, mercury, rubidium, and cesium) would be surveyed and, if present, properly abated, and disposed of according to regulations prior to renovation and demolition activities. Use of hazardous materials would occur in accordance with regulations.

Cumulative Impacts

Potential cumulative impacts of the Preferred Alternative in combination with other past, present, or reasonably foreseeable future actions were analyzed and found to be not significant.

Public Involvement

The Navy published a Notice of Availability of the Draft EA in *The Washington Times* on February 6, 7, and 8, 2017. The notice described the Proposed Action, solicited public comments on the Draft EA, provided dates of the public comment period, and announced that the EA was available for review. No public comments were received.

The Navy consulted with agencies regarding the Preferred Alternative including the District of Columbia Historic Preservation Office, the National Capital Planning Commission, the Commission of Fine Arts, the Advisory Council on Historic Preservation, the U.S. Fish and Wildlife Service, the District Department of Energy and Environment, and the local Advisory Neighborhood Commission.



Marcel Acosta
Executive Director



Date