NATIONAL SCIENCE FOUNDATION 4201 Wilson Boulevard Arlington, Virginia 22230



October 19, 2016

Ms. Nydia Préstamo
Deputy State Historic Preservation Officer
State Historic Preservation Office
PO Box 9023935
San Juan, Puerto Rico 00902-3935

RE: Section 106 Assessment of Effects for the Proposed Changes to Arecibo Observatory Operations, Arecibo, Puerto Rico

Dear Ms. Préstamo,

The National Science Foundation (NSF) Directorate for Mathematical and Physical Sciences, Division of Astronomical Sciences has identified the need to divest several facilities from its portfolio to retain the balance of capabilities needed to deliver the best performance on the key science of the present decade and beyond. The Arecibo Observatory in Puerto Rico is one of the facilities identified for potential divestment. The decision regarding the potential changes to operations of the Arecibo Observatory in Puerto Rico is considered a federal undertaking and triggers compliance with Section 106 of the National Historic Preservation Act (NHPA). While engaging in Section 106 consultation under NHPA, NSF is simultaneously producing an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) to identify potential environmental impacts associated with the proposed changes to operations.

NSF formally initiated Section 106 consultation with your office on July 5, 2016. The consultation letter included information regarding the location, background, and proposed Alternatives. On August 8, 2016, your office responded, requesting to be kept abreast of any determinations regarding the historic Arecibo Observatory. With this letter, NSF is transmitting the *Proposed Changes to Arecibo Observatory Operations: Historic Properties Assessment of Effects* (CH2M, 2016) and requesting concurrence on the findings of effect for the five proposed Alternatives. The proposed Alternatives are listed below for reference:

- Alternative 1 Collaboration with Interested Parties for Continued Science-focused Operations. (Preferred Alternative)
- **Alternative 2** Collaboration with Interested Parties for Transition to Education-focused Operations

- Alternative 3 Mothballing of Facilities
- Alternative 4 Partial Deconstruction and Site Restoration
- Alternative 5 Complete Deconstruction and Site Restoration
- No-Action Alternative Continued NSF Investment for Science-focused Operations

In 2008, the Arecibo Observatory was listed in the National Register of Historic Places (NRHP) as the National Astronomy and Ionosphere Center historic district. It was determined to be significant under NRHP Criteria A (associated with events that have made a significant contribution to the broad patterns of our history) and C (embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master). In accordance with email communication received from your office on May 20, 2016, there are eight buildings and one structure that contribute to the NRHP-listed historic district.

Under proposed Alternatives 1, 2, 4, and 5, historic properties that contribute to the NRHP-listed historic district would be deconstructed, resulting in a finding of Adverse Effect under Section 106. Alternative 3 would mothball and retain historic properties for future use, resulting in a finding of No Adverse Effect to historic properties. Under the No-Action Alternative, there would be no change from the existing conditions, resulting in a finding of No Historic Properties Affected. The finding of effect for each proposed Alternative is summarized in the table below:

Proposed Alternative	Finding of Effect
Alternative 1	Adverse Effect
Alternative 2	Adverse Effect
Alternative 3	No Adverse Effect
Alternative 4	Adverse Effect
Alternative 5	Adverse Effect
No-Action Alternative	No Historic Properties Affected

In compliance with 36 Code of Federal Regulations (CFR) 800.5(a), NSF is requesting concurrence on the findings of effects listed above for the Proposed Changes to Arecibo Observatory Operations and transmitting the Proposed Changes to Arecibo Observatory Operations: Historic Properties Assessment of Effects technical report for your review (enclosed). We will also provide a copy of this report to the six Consulting Parties that have been identified for this undertaking.

We respectfully request your response within 30 calendar days of your receipt of this letter. If you have any questions, please contact me by phone at 703-292-4592, by email at cblanco@nsf.gov or by U.S. Postal Service to NSF, Office of the General Counsel, Suite 1265, 4201 Wilson Blvd., Arlington, Virginia 22230. We look forward to further consultation with you on this proposed undertaking.

Sincerely,

/s/

Caroline M. Blanco Federal Preservation Officer Assistant General Counsel Office of the General Counsel

Cc: E. Pentecost K. Hamilton K. Zender, CH2M

Enclosure:

1. Proposed Changes to Arecibo Observatory Operations: Historic Properties Assessment of Effects