# STATEMENT OF FINDINGS FOR EXECUTIVE ORDER 11988 (FLOODPLAIN MANAGEMENT)

Temporary Employee Locker Rooms and Offices - Liberty Island Statue of Liberty National Monument

| Recommended:             |                                      |          |
|--------------------------|--------------------------------------|----------|
|                          | Superintendent,                      | Date     |
|                          | Statues of Liberty National Monument |          |
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| Certification of         |                                      |          |
|                          |                                      |          |
| Technical Adequacy and   |                                      |          |
| Servicewide Consistency: |                                      | <u> </u> |
|                          | Chief, Water Resources Division      | Date     |
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Director, Northeast Region Office

Approved:

Date

## FLOODPLAIN STATEMENT OF FINDINGS

#### **INTRODUCTION**

Hurricane Sandy flooded and severely damaged the housing units on Liberty Island which is located in upper New York Harbor. These housing units are scheduled for demolition. These buildings housed approximately 9,000 square feet of space used by employees for locker rooms and other administrative tasks. Since the hurricane, these functions have been housed in two construction trailers totaling approximately 400 square feet. The space is inadequate for park functions and additional space is needed.

The National Park Service (NPS) is proposing to construct four (4) modular buildings within the non-public area of Liberty Island. The proposal to add temporary modular buildings to the island is an interim measure to allow the park to function more effectively and safely while plans for a new museum and/or other permanent employee space in the Administrative building can be completed. These modular buildings are expected to be on the Island for approximately five years. A new museum will undergo separate compliance and public review.

The proposal would be completed in two phases (see figure 1 and 2). Phase 1 would construct two prefabricated buildings on the lawn north of the flagpole plaza and east of the housing court. These buildings would be 480 sq. ft. each (20 feet by 24 feet) and used as men and women's locker and shower rooms. The buildings would not be on foundations or slabs. Utilities sewer water electric and other utilities would run above ground or through existing conduits. These buildings would remain in place 9 months to a year. Once the housing units were demolished, these buildings would move to the less visible housing court area. Phase 2 would move the original two prefabricated buildings to the employee housing court and add two additional 480 sq. ft. buildings. All buildings would have concrete slab foundations since these are expected to stay in place approximately five years. Existing utility hook ups would be utilized. After the buildings are removed the area would be restored to lawn.

This statement of findings has been prepared in accordance with Executive Order 11988 (Floodplain management). The objective of E.O. 11988 is to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. NPS Director's Order #77-2 and Floodplain Management and Procedural Manual #77-2 provide NPS policies and procedures for complying with E.O. 11988. This Statement of Findings (SOF) documents compliance with these NPS floodplain management procedures for the proposed temporary modular buildings on Liberty Island.

#### JUSTIFICATION FOR USE OF THE FLOODPLAIN

The proposed buildings are required to provide adequate temporary operational space for the management of Liberty Island and are therefore functionally dependent on a location on the island. These buildings have to be located in the 100-year floodplain. There are no non-public flood-free areas on Liberty Island to locate these operational facilities. The only area on Liberty Island above the base flood elevation is Fort Wood and the surrounding public lawn areas. Consequently, there are no practicable alternatives for proposed development within the floodplain.

#### DESCRIPTION OF SITE-SPECIFIC FLOOD RISK

The Federal Emergency Management Agency (FEMA) produces flood hazard mapping as part of the National Flood Insurance program. After Hurricane Sandy, FEMA revised the Flood Insurance Rate Maps (FIRMs) that show flood risk zones and their boundaries. The revised preliminary FIRM for the

project area was issued January 30, 2015. That map shows most of Liberty Island including the project area within the 100-year floodplain. The 100-year base flood elevations for the Phase 1 and Phase 2 building locations are 13 to 14 feet. Portions of these two locations are within the coastal flood zone with a wave action velocity hazard (see figure 3).

The NPS has considered the effects of climate change by using the updated FIRM map and believes that the project design complies with the NPS Level 3 Handbook "Addressing Climate Change and Natural Hazards, Facility Planning and Design Considerations, January 2015".

### **MITIGATION ACTIONS**

The buildings would not be designed to withstand flooding and would be expected to be destroyed during a major storm and flooding event. However, the buildings are modular prefabricated structures with limited site improvements to minimize government investment and potential risk of flood loss or damage to government property. The buildings would also be for temporary use, expected to be five years, until permanent space in a new or existing building designed to reduce risks from flooding and storm damage is provided.

The park has a flood evacuation plan that would direct emergency actions and evacuations in event of a flood that would reduce hazards to human safety.

#### SUMMARY

The NPS proposes to construct four temporary modular buildings on Liberty Island as an interim measures to provide needed administrative space that supports operations on Liberty Island. Although construction of the proposed buildings would be located within the 100-year floodplain, the buildings would be minimal cost prefabricated structures that are expected to be removed within five years once permanent administrative space is provided in a new or existing building on Liberty Island.

#### LITERATURE CITED

Federal Emergency Management Agency (FEMA)

2015 Flood Insurance Rate Map, City of New York, New York, Bronx, Richmond, New York, Queens, and Kings Counties. Panel 183 of 457. Map Number 3604970183G. Revised Preliminary Map, January 30, 2015.

National Park Service

2015 Addressing Climate Change and Natural Hazards, Facility Planning and Design Considerations, January 2015.





