FEMA

MITIGATION POLICY

FEMA Policy 205-080-01 Elevated Foundation Systems

I. **TITLE:** Pilot Activity - Elevated Foundation Systems under the Hazard Mitigation Grant Program (HMGP) for Hurricane Sandy Major Disaster Declarations

II. **DATE OF ISSUANCE:** March 18, 2013

III. **POLICY STATEMENT:** An Elevated Foundation System is an eligible activity under the Hazard Mitigation Grant Program.

IV. **PURPOSE:** The purpose of this policy is to describe a pilot mitigation activity which will assist in the recovery from the devastating effects of Hurricane Sandy and help create more resilient and sustainable communities.

V. **SCOPE AND EXTERNAL AUDIENCE:** This policy is applicable for all HMGP Grants made available for Hurricane Sandy major disaster declarations.

VI. **AUTHORITY:** FEMA has authority under Section 404 of the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (Stafford Act), 42 U.S.C. § 5170c, to provide funding through the Hazard Mitigation Grant Program (HMGP) for hazard mitigation measures that are cost effective and substantially reduce the risk to life and property.

VII. **OBJECTIVE**: To assist local communities in recovering from Hurricane Sandy by providing flexibility in the implementation of HMGP. Some property owners may choose to demolish their existing damaged residential structures and build new ones instead of repairing and elevating the existing residential structures. This policy provides funds under HMGP to pay part of the cost of elevating the new structure to the base flood elevation or higher.

VIII. **ABBREVIATIONS:**

ABFE	Advisory Base Flood Elevation
ASCE	American Society of Civil Engineers
BFE	Base Flood Elevation
CFR	Code of Federal Regulations
EHP	Environmental and Historic Preservation
FEMA	Federal Emergency Management Agency
FIMA	Federal Insurance and Mitigation Administration
FIRM	Flood Insurance Rate Map
FMA	Flood Mitigation Assistance program
HMA	Hazard Mitigation Assistance

HMGP	Hazard Mitigation Grant Program
ICC	International Code Council
NFIP	National Flood Insurance Program
OMB	Office of Management and Budget
SFHA	Special Flood Hazard Area
SRL	Severe Repetitive Loss
Stafford Act	Robert T. Stafford Disaster Relief and Emergency Assistance Act

IX. POLICY DETAILS:

A. Eligibility Requirements

In addition to all other HMGP eligibility requirements, including cost effectiveness, the Elevated Foundation System must satisfy the following requirements:

1. The elevated structure must be a single family, detached, residential structure that was substantially damaged or destroyed by Hurricane Sandy. Properties located in a Sandy declared State and that are included on the National Flood Insurance Program (NFIP) validated Severe Repetitive Loss (SRL) list are also eligible.

2. The project must result in a structure suitable for occupancy that meets the minimum required elevation level and foundation type utilizing the best available flood hazard data. The construction of an Elevated Foundation System alone does not constitute a complete hazard mitigation solution as required by 44 CFR 206.434 *Eligibility*. Prior to closeout, an Elevation Certificate and a Certificate of Occupancy from the authority having jurisdiction demonstrating the completed structure is suitable for occupancy and conforms to NFIP requirements must be submitted to FEMA.

3. This activity is only available to property owners who owned the property at the time of the event for which funding is authorized. This extends to successors and assigns who gained title to the property as a result of death or incapacity of that property owner.

B. Eligible Costs

1. Eligible costs for the Elevated Foundation System include costs for the vertical and horizontal elements necessary to construct the foundation system up to but not including the lowest finished floor such as posts, beams, joists, anchorage, connections and subfloor. Other eligible costs include access for ingress/egress,

and elevating utility hookups, and heating, ventilation, and air conditioning (HVAC) components.

2. The Federal share of the Elevated Foundation System funding may be up to 20 percent of the total structure construction cost or $45,000,[1] whichever is less. The Federal share cost limit is based on national average construction costs. The Federal share construction cost limit may be adjusted using an industry accepted locality adjustment factor such as RS Means, Standard & Poor, or other acceptable industry standard.

3. Non-construction costs associated with the Elevated Foundation System project such as costs for demolition, survey, design fees and permits, are eligible project costs. These costs will be considered outside the construction cost limit on the Federal share for the Elevated Foundation System.

4. Increased Cost of Compliance (ICC) funds may be used for eligible project activities and is an allowable source of local match for HMGP.

5. If the project application includes mixed mitigation activities, the costs for additional approved mitigation actions not associated with the foundation system such as mitigation for high winds are eligible project costs. However, these costs must be delineated in the application cost estimate as separate line items and they will not be deducted from the construction cost limit for the new elevated foundation system.

C. Project Design Recommendation & Structure Size

1. FEMA recommends the Elevated Foundation System project be designed and constructed in conformance with the design criteria of the American Society for Civil Engineers (ASCE) *Flood Resistant Design and Construction* (ASCE 24-05) or newer version, as a minimum standard. FEMA will consider a project application stating that ASCE 24-05 or a newer version will be used, as being consistent with HMA engineering feasibility and effectiveness requirements. Project applications that do not indicate the use of ASCE 24-05 may need to submit documentation to demonstrate the project meets the engineering feasibility and effectiveness requirement.

2. FEMA recommends the 2006 or newer International Building Code or International Residential Code, published by the International Code Council, or the local or state building code, whichever is most stringent, be used as the minimum construction standard for the non-foundation structure components such as the main living areas and roof.

3. Neither the new structure square footage nor the footprint shall be more than 10 percent greater than that of the pre-event overall structure square footage or pre-event footprint. For example, a 2,000 square foot, two-story home with a 1,000 square foot footprint, when rebuilt, may not exceed 2,200 square feet for the whole structure and the footprint may not be greater than 1,100 square feet.

4. The new foundation footprint may be altered or relocated within the same property lot. The application review process may be streamlined if the new footprint overlaps the pre-event footprint by at least 50 percent. Otherwise, the application review may take longer in order to evaluate the potential for increased impacts to environmental and historic resources. The new footprint location cannot result in an increased risk to the structure.

D. Floodplain Management

1. The Elevated Foundation System activity is not allowed in any regulatory floodway, V-Zone, or Coastal Barrier Resource Area Zone.

2. The project must utilize the best available flood hazard data (e.g. ABFE or preliminary flood maps, if available) to determine the required foundation system design and elevation. FEMA staff at the Joint Field Office or FEMA Regional Office may be contacted for information regarding the best available data.

3. If the best available data identifies the new mitigated structure is located in a Special Flood Hazard Area (SFHA), flood insurance must be maintained for the life of the structure to an amount at least equal to the project cost or to the maximum insurable limit under the National Flood Insurance Program (NFIP), whichever is less.

4. A deed restriction describing the flood insurance requirement must be filed and include the following language:

> *This property has received Federal hazard mitigation assistance pursuant to 42 U.S.C. §5170c. Federal law requires that insurance coverage on this property must be maintained during the life of the property regardless of transfer of ownership of such property. Pursuant to 42 U.S.C. §5154a, failure to maintain flood insurance on this property may prohibit the owner from receiving*

Federal disaster assistance with respect to this property in the event of a flood disaster.

5. Elevated Foundation System projects must be implemented and maintained in compliance with the minimum floodplain management and land use standards in 44 CFR Part 59 *General Provisions* and Part 60 *Criteria for Land Management and Use*.

E. Other General Requirements

1. Cost associated with implementation of the activity but incurred prior to grant award are not eligible. Projects initiated or completed prior to FEMA grant award are not eligible.

2. Pre-award costs directly related to developing the subapplication may be considered for eligibility only if they are identified as separate line items in the cost estimate of the subapplication. Pre-award costs are those costs incurred after the date of the disaster declaration and prior to the application approval. These may or may not be eligible for reimbursement under HMGP in accordance with the Office of Management and Budget (OMB) Circular A-87 *Cost Principles for States, Local, and Indian Tribal Governments.*

3. Projects must adhere to all statutes, regulations, and requirements that apply to HMGP funding, including but not limited to the Stafford Act, 42 U.S.C. §5121 *et seq.*,Title 44 CFR *Emergency Management and Assistance*, and all other applicable federal, state, and local environmental, historic preservation, cost effectiveness, and grants management requirements, as well as applicable program guidance.

4. This policy represents FEMA's interpretations of a statutory or regulatory requirement and/or sets forth standard operating procedures. The policy itself does not impose legally enforceable rights and obligations, but sets forth a standard operating procedure or Agency practice that FEMA employees follow to be consistent, fair, and equitable in the implementation of the Agency's authorities.

X. ROLES & RESPONSIBILITIES: Roles and responsibilities for all Federal, State, Tribal and local parties are consistent with those outlined in the Uniform Administrative Requirements (44 CFR Part 13), Hazard Mitigation Grant Program (44 CFR Part 206 Subpart N), and the HMA Unified Guidance.

XI. MONITORING AND EVALUATION: The grantee must submit financial and performance reports to FEMA in accordance with the reporting requirements outlined in the Uniform Administrative Requirements (44 CFR Part 13), Hazard Mitigation Grant Program (44 CFR Part 206 Subpart N), and the HMA Unified Guidance. Grantees must comply with the administrative and audit requirements of the Uniform Administrative Requirements (44 CFR Part 13), and the Hazard Mitigation Grant Program (44 CFR Part 206 Subpart N), as well as the terms and conditions of the grant award agreement.

XII. RESPONSIBLE OFFICE: The FIMA Risk Reduction Division Grants Policy Branch is the originating office for this policy document, with the overall responsibility for policy updates and enforcement. If you have any questions, please contact Kayed Lakhia, Deputy Director, Risk Reduction Division at (202) 646-3458.

XIII. SUPERSESSION: There are no previous mitigation policies or guidance related to this subject.

XIV. REVIEW DATE: This policy is only applicable to HMGP resulting from Hurricane Sandy declarations. It will expire five (5) years from the date in paragraph II above.

David L. Miller
Associate Administrator
Federal Insurance and Mitigation Administration
Federal Emergency Management Agency

[1] Elevated foundation construction costs are based on average costs for standard construction for a 2,000 square foot, two-story, wood framed home. Costs are based on the national average for construction costs and validated against RS Means 2012 Residential Repair & Remodeling Costs. The $45,000 construction limit includes costs for the foundation elements up to the lowest finished floor including the bottom of the lowest floor framing and subfloor, access for ingress/egress for first floor entry, and costs to elevate utility hookups, and electrical and HVAC equipment. These costs assumed an elevation of 10 feet; the minimum required elevation and foundation type will vary for each structure and generally will be lower than 10 feet.