

FLOOD HAZARD MITIGATION

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MANDEVILLE, LA**

FLOOD HAZARD MITIGATION

- FOR OVER 40 YEARS THE OLDER HISTORIC PRE-FLOOD MAP BUILDINGS HAVE HAD SUBSIDIZED FLOOD POLICY RATES
- FLOODING IS THE MOST EXPENSIVE DISASTER TYPE IN THE US
- THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) IS OVER \$20 BILLION IN DEBT TO THE US TREASURY
- 2015/2016 THE SUBSIDIZED RATES START TO RE-ADJUST TO ACTUARIAL RATES
- FLOOD MITIGATION PROJECTS REDUCE THE RISK OF FLOODING AND KEEP FLOOD POLICY RATES REASONABLE
- EVERY DOLLAR SPENT ON FLOOD MITIGATION PROJECTS SAVES \$4 DOLLARS IN DISASTER RECOVERY COSTS

FLOOD HAZARD MITIGATION

**NEWPORT, RI
FLOOD MAP**



FLOOD HAZARD MITIGATION



**NATIONAL FLOOD INSURANCE PROGRAM
(NFIP)**

FLOOD HAZARD MITIGATION

NFIP INCREASES BEGINNING 4/2016

- 12%/YR FOR PRIMARY RESIDENTIAL - \$2500/YR MAX
- 19%/YR FOR NON PROFITS
- 25%/YR FOR NON-PRIMARY RESIDENCES
SEVERE REPETITIVE LOSS, INCOME PRODUCING
RESIDENTIAL, COMMERCIAL

FLOOD HAZARD MITIGATION

PREMIUM AT 4 FEET BELOW
BASE FLOOD ELEVATION

\$9,500/year
\$95,000/10 years



BFE

PREMIUM AT
BASE FLOOD ELEVATION

\$1,410/year
\$14,100/10 years



BFE

PREMIUM AT 3 FEET ABOVE
BASE FLOOD ELEVATION

\$427/year
\$4,270/10 years



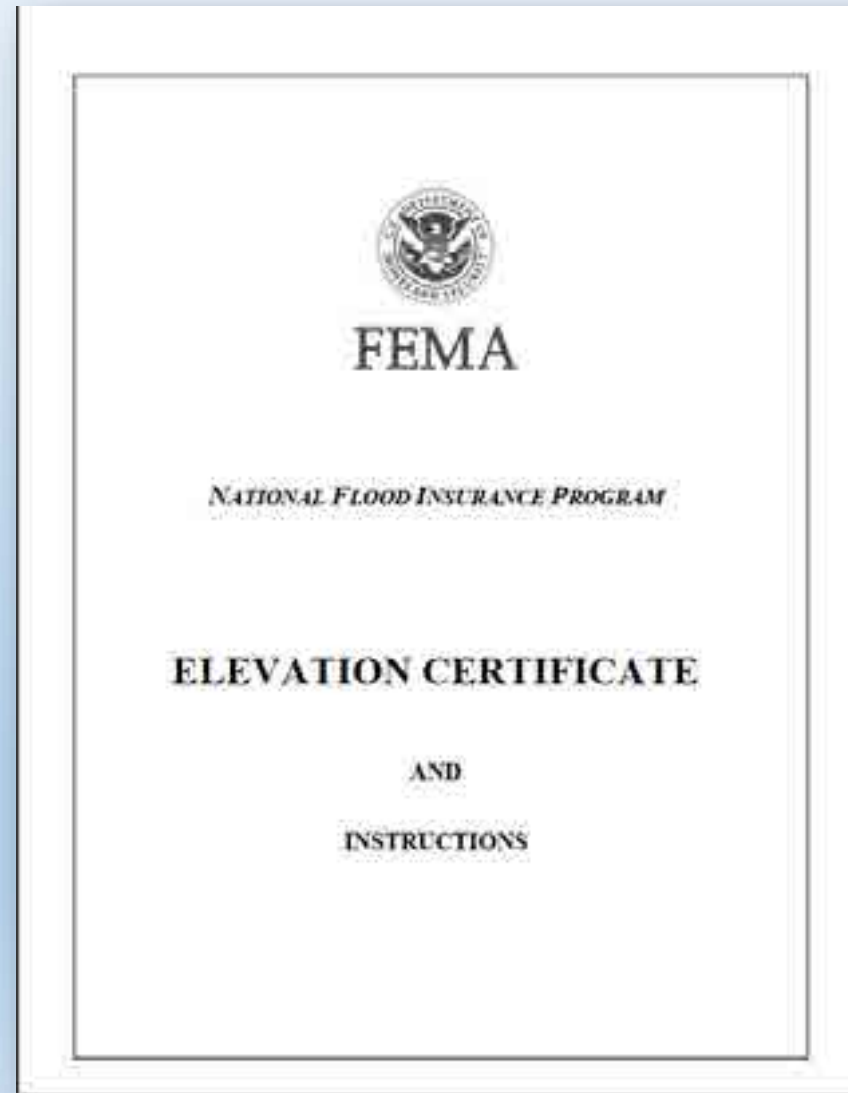
BFE

PRE-FLOOD MAP BUILDINGS POLICY RATES ARE INCREASING

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**HOW DO WE DETERMINE THE
ELEVATION OF A BUILDING?**

FLOOD HAZARD MITIGATION



ELEVATION CERTIFICATE

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number 2

A8. For a building with a crawlspace or enclosure(s):
a) Square footage of crawlspace or enclosure(s) 1026 sq ft
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 0
c) Total net area of flood openings in A8.b) _____ sq ft
d) Engineered flood openings? Yes No

A9. For a building with an attached garage:
a) Square footage of attached garage _____ sq ft
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____
c) Total net area of flood openings in A9.b) _____ sq ft
d) Engineered flood openings? Yes No

SECTION B -- FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. FIRM Community Name & Community Number
B2. County Name
B3. Zone

NEWPORT 445403 NEWPORT RHOODE ISLAND

B4. Map/Panel Number
B5. Suffix
B6. FIRM Index Date
B7. FIRM Panel Effective/Revised Date
B8. Flood Severity
B9. Base Flood Elevation(s) (Zone #0, use base flood depth)

0177 J Sept. 4, 2013 Sept. 4, 2013 A6 12

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:
 FIS Profile FIRM Community Determined Other/Source: _____

B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source: _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No
Designation Date: ____/____/____ CBRS OPA

SECTION C -- BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AP, AR/AD. Complete items C2.a-h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.
Benchmark Used: USGS DISK Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in Items a) through h) below. NGVD 1929 NAVD 1988 Other/Source: _____
(Datum used for building elevations must be the same as that used for the BFE.)

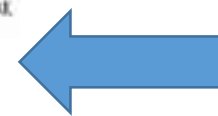
Check the measurement unit.

a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	<u>0</u> <u>4</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
b) Top of the next higher floor	<u>4</u> <u>3</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
c) Bottom of the lowest horizontal structural member (V Zones only)	<u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters
d) Attached garage (top of slab)	<u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters
e) Lowest elevation of machinery or equipment serving the building (Describe type of equipment and location in Comments)	<u>5</u> <u>2</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
f) Lowest adjacent (finished) grade next to building (LAG)	<u>3</u> <u>9</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
g) Highest adjacent (finished) grade next to building (HAG)	<u>4</u> <u>5</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	<u>4</u> <u>3</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters

SECTION D -- SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available.

The
Townsendhouse
finished floor is
6ft below the
required
minimum flood
map elevation



FLOOD HAZARD MITIGATION

TYPES OF FLOOD MITIGATION PROJECTS THAT RESULT IN LOWERING FLOOD RISK AND FLOOD POLICY COSTS

- ACQUISITION/DEMOLITION
- RELOCATION
- DRY FLOOD PROOFING (COMMERCIAL ONLY)
- ELEVATION/FLOOD VENTING

ELEVATION

FLOOD HAZARD MITIGATION



LOW ELEVATION WITH FLOOD VENTED ENCLOSURE

FLOOD HAZARD MITIGATION ELEVATED WITH ENCLOSURE

NON-ENGINEERED

ENGINEERED



TOTAL FLOOD COVERAGE:
19.48 SQ FT

TOTAL FLOOD COVERAGE:
200 SQ FT

FLOOD HAZARD MITIGATION



LOW ELEVATION WITH OPEN FOUNDATION

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HIGH ELEVATION OPEN FOUNDATION

DRY FLOOD PROOFING

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ENTRANCE CLOSURE

FLOOD HAZARD MITIGATION



ENTRANCE CLOSURE OR BUILDING ENCLOSURE

FLOOD HAZARD MITIGATION

- **FLOOD MITIGATION COSTS VARY BY TYPE, WET/DRY. A LICENSED DESIGN PROFESSIONAL, ARCHITECT/STRUCTURAL ENGINEER NEED TO BE ENGAGED TO PROVIDE DESIGN ASSISTANCE AND PLANS FOR PERMITTING**
- **PROJECT FINANCING CAN BE CASH, GRANTS, EQUITY, HUD 203K, ICC**
- **POSSIBLE FUTURE FUNDING – MULTI BANK LOW INTEREST LOAN POOLS, REVENUE BONDING**

FLOOD HAZARD MITIGATION

**+2 MILLION PRE-FLOOD MAP BUILDINGS
WITH AN UNKNOWN NUMBER OF HISTORIC
DESIGNATED ONES NEED FLOOD
MITIGATION AS THE HISTORIC ERA OF
CLIMATE CHANGE CONTINUES AND THE SEA
LEVEL RISES**

FLOOD HAZARD MITIGATION

MITIGATION PROVIDES RESILIENCY AND SUSTAINABILITY
IN A NEW ERA



1840'S BRICK BETWEEN POST – SEVERE REPETITIVE LOSS,
MANDEVILLE, LA

FLOOD HAZARD MITIGATION

GETTING STARTED

- **GET ELEVATION CERTIFICATE**
- **GET FOUNDATION DRAWINGS AND ELEVATIONS**
- **GET ESTIMATES FOR CONSTRUCTION/LIFTING AND LOWERING HOME**
- **ARRANGE FINANCING**
- **EXECUTE PROJECT**
- **FINAL ELEVATION CERTIFICATE**
- **GET LOWER FLOOD INSURANCE POLICY RATES**

FLOOD HAZARD MITIGATION

SCOPE OF WORK SPREAD SHEET

Task	Party	Quantity	Cost	Total	Actual Quantity
Elevation Cert				\$ -	
Soil Test				\$ -	
Engineering & Drawings				\$ -	
Permits				\$ -	
Temp Pole				\$ -	
Job Site Bathrooms				\$ -	
Dumpsters/Site Trash Removal				\$ -	
Site Prep for Elevation				\$ -	
Electric Disconnect/Reconnect				\$ -	
HVAC Disconnect & Reconnect				\$ -	
Erosion Control				\$ -	
Elevation				\$ -	
Foundation demo and removal				\$ -	
Excavation				\$ -	
Rock				\$ -	
Foundation construction				\$ -	
Carpentry - stairs/landings/utility stands				\$ -	
Plumbing Rough Water & Sewer				\$ -	
Gas Line				\$ -	
Insulated Water Line				\$ -	
Hose Bibs - Lowered				\$ -	
Grade out yard & dirt as needed				\$ -	
Install sod by Pallet				\$ -	
Downspouts				\$ -	
General Labor				\$ -	
Landscaping				\$ -	
Site Supervision - Related to work				\$ -	

**THE FLOOD HAZARD MITIGATION
INDUSTRY IS HERE TO ASSIST YOU IN
MAKING YOUR COMMUNITY MORE
RESILIENT FROM THE COSTLY DAMAGES
OF FLOODING AND HELPING TO KEEP
FLOOD INSURANCE POLICY RATES
REASONABLE**