

Flood and Storm Resistant Design Best Practices

The Post-Sandy Housing Task Force is requesting AIA, APA and ASLA Chapters and colleague share examples of “Best Practices” of flood-resistant and storm-resilient housing. Please provide as much information as possible or as relevant for each category below and return with project documentation to the AIA New York Chapter, attention David Levine via email dlevine@dattner.com, hopefully by February 15th 2013. Text may input directly into this Word document and graphics should be formatted as JPG or TIFF and e-mailed.

Question about project documentation may be directed to David Levine via email dlevine@dattner.com or by phone 212-589-7020. Thank you in advance for participating.

Project Information	
Respondent's Name	Dana Brown & Associates, Inc.
Respondent's Email	dbrown@danabrownassociates.com
Project Name	Pontilly Hazard Mitigation Grant Program Project
Project Location	New Orleans, Louisiana
Architect and/or Engineer	Dana Brown & Associates – Landscape Architect, CDM Smith – Engineer
Client	New Orleans Redevelopment Authority (NORA)
Building Type (1-2 family, multi-family, townhouses, mixed-use)	Two neighborhoods – Pontchartrain Park and Gentilly Woods – of single-family residential.
New Construction or Alteration	Alteration/retrofit of existing streets and canal, new construction on vacant lots – stormwater management.
Year completed	2014
Project Cost (if available)	\$13.5 Million
Project Description (if available)	The Pontilly neighborhood of New Orleans, LA is an approximately 850 acre portion of the city that is susceptible to frequent flooding from moderate to severe storm events. The project proposes to implement a series of small interventions, known as stormwater BMPs, which are linked together to reduce peak runoff volumes and lower peak floodwater elevations
Flood Elevation Data	
Base Flood Elevation	The BFEs for the project site range from 0 ft to -1 ft.
Design Flood Elevation	N/A
Freeboard Elevation used for lowest occupied floor	N/A
FIRM Zone for property	2252030095E, 2252030115E
Design Codes or Reference Standards for flood-resistance (i.e. ASCE 24-05, Municipal Building Codes)	N/A
Design Strategies	
Describe flood-proofing strategies/technologies. Specify if building is wet or dry flood-proofed.	N/A

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Describe design strategy to provide accessibility to building lobby and other ingress and egress issues	N/A
Describe use of flood-resistant materials	N/A
Describe use of any unique structural system to mitigate flood damage	A series of bmps have been designed and will be installed that intercept water as it flows down the slope of the landscape. Curb extensions with bioretention cells, vacant lots converted to detention basins, pervious concrete on-street parallel parking, ultra urban bioswales, and drainage canal modifications work together to reduce the overall stormwater volume and peak floodwater elevations. Modeling shows that during a 10-year storm event, areas of the neighborhoods that normally experience flooding and repetitive loss would no longer flood above a few inches in the streets. Flood levels reduced as much as six feet in low lying areas.
Describe mechanical and electrical systems, including provisions for temporary services during flood conditions.	N/A
Describe design strategies for protection of fuel service or storage	N/A
Describe design strategies for continuation of potable water and discharge of sanitary waste	Utilities such as water, gas, sewer, and electricity are not affected by flood events or the proposed design.
Describe design strategies for occupancy during flood event and post-flood	N/A
Describe if building designed for pre-flood relocation of goods, occupants, or vehicles	N/A
Describe any uses (parking, storage, etc.) located below the base flood elevation	N/A
Food-Based Regulatory Action	
Describe local building code or zoning regulations in such as: <ul style="list-style-type: none"> • Raising permitted building height based on design flood elevation • FAR deductions allowed for flood-triggered building components (i.e. long ramps or raised mechanical spaces) 	N/A

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<i>Please share project graphics</i>	
Typical Floor plans & Site Plan	Plan attached
Elevations / Sections	Sections attached
Renderings/ Photographs	Renderings attached
Details	
<i>References/Recommendations</i>	
References or recommendations for additional information	Please see attached report for more information regarding the Pontilly HMGP Program