

Disaster housing holdup

By Lois Weiss

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IF ONLY: Here's a look at emergency housing plans by Manhattan-based Viraline Architecture that would reshape Red Hook, Brooklyn, after a Hurricane Sandy-like disaster.

Commissioner **Joseph Bruno**'s Office of Emergency Management was preparing for post-disaster housing back in 2007, but the wheels of government sometimes turn too slowly — and after five years the prototypes are just becoming available, and the first units are still at least a year away.

"I wish we had this built, but it was hard to fund it and hard to get interest in it," Bruno told *The Post* yesterday. That should change post-Sandy.

"What If New York City?" was an architectural competition launched by OEM in September 2007 to respond to the scenario that a hypothetical Category 3 hurricane would devastate a neighborhood, dubbed "Prospect Shore," with a surge of water.

Architects were asked to design semi-permanent housing that would be immediately needed for 18,000 people, while another 20,000 or so would need housing while awaiting repairs.

"How can they be provided safe, comfortable living space? How can this housing be quickly deployed and adapted to different site conditions? How can it be reused in subsequent emergencies, environmentally sustainable, and cost effective?" the instructions from Bruno asked entrants.

Lance Jay Brown, the independent architect who ran the jury competition, said yesterday, "The good news is that something is happening, but the bad news is that it didn't happen in time for [Sandy]."

Bruno said, "What they had [in the competition] was a concept, but what we now have is a specification and sizing. We have architectural and engineering drawings and are determining what the costs are going to be." Bruno would not discuss pricing but was insistent that "we are not building \$100,000 condos."

After Katrina, small cottages were developed by New Orleans that sold for around \$20,000, and sources said eventual pricing for the modules could be even lower for New York City, based on volume.

Only about 10 trailers or cottages can be used per acre, but the idea for New York was to have denser, multistory housing that could accommodate 200 families per acre.

Out of about 140 entries from around the world, 10 entries were provided with a stipend of \$10,000 each to bring them closer to reality. Some proposals, of course, were more wishful thinking — like the fanciful Cloud City that could be hung over the original neighborhood — while others took a more practical, serious approach.

Bruno's concept is to have the housing erected close to or in the original neighborhood so that people can continue to go to their work or schools.

Jeffrey Murphy, a partner with Murphy Burnham Buttrick Architects, whose team design was a finalist, said of OEM, "I wouldn't say they fell down but . . . there were many architects that entered this competition, and it was a real opportunity to push forward to coming up with a prototype. . . . They are not being deployed today, and this was something that was considered."

Murphy's company concept, Community Provisional Residence, was a modular design created from mold-resistant boating and surfer materials so it could be washed down and reused.

Stored in its own box, he said one could be kept "behind every firehouse in the country," and then brought to and assembled at the disaster site.

Another winner, Rapidly Deployable Inflatable Container, designed by Viraline's **James Vira** and **Jason Cadorette**, could also be easily assembled into apartment buildings.

Vira recalled that a Request for Qualifications was issued to find manufacturers for "a couple of the more conventional designs" but was unaware of any follow-up. Murphy also worked with a manufacturer and responded to the RFQ but was left in the dark.

Brown said several of the ideas have finally been melded into one prototype that was documented in a recent 70-page report. "The city was looking at fabrication," he said. "There is a prototype that is under development. . . . Nobody was under the impression that we were going to be whacked with Sandy last week."

Nevertheless, a program on Design for Risk: Climate Change Adaptation in NYC was presented in early September at the city's Center for Architecture, and city officials discussed some of the architectural ideas that the city is floating to mitigate future flooding and other climate-change problems.

On the morning of Oct. 29, as the city braced for Sandy, one of the speakers at that event, **E. Thaddeus Pawlowski**, who oversaw the "What If NYC" competition for OEM and is now at City Planning, tweeted, "I'm calling a mandatory evacuation of Prospect Shore."

Bruno declined to identify the proposals that became the inspirations for the prototype but noted they were modular.

He is unsure how soon the prototype can be manufactured or deployed, but expects one will be developed very soon and observed for at least a year before going into production.

"We are going forward with producing a prototype, and we were at the beginning of that," he said yesterday.

"We have agreements with the [Army] Corps of Engineers and FEMA and all our city partners," he said.

"We will build a prototype and test it for a year or so and come up with a first-rate specification and publish it to the industry, and when we need housing it would be helpful," said Bruno, noting this was also a program that is a priority and will be a legacy for **Mayor Bloomberg**.

"This is a pretty aggressive program, but it has taken us a long time to get it going," said Bruno.

So while Bruno and other city officials thought some five years ago that they might need a major housing solution, that fact is little comfort today for Sandy's cold and drenched citizen victims.