ARC466 - ARCHITECTURAL DESIGN 4 - SPRING 2015

Project 2 – Housing Recommendations for Resiliency

Instructor - Eric Anderson

Natural Disasters are affecting human settlements with increasing incidents. Superstorm Sandy was a milestone for Long Island; thousands of people are living or displaced in houses that ultimately will be torn down.

The Federal Government has agencies with oversight for promulgation of design and technical standards for housing reconstruction:

Housing and Urban Development (HUD)

Federal Emergency Management Agency (FEMA)

New York state agencies, local building code jurisdictions, contractors, architects and homeowners often identify confusion in interpretation of the standards that each agency uses to determine if a project meets the standards for constructed resiliency.

Your group has been retained by the key municipalities of southern Nassau County to review all federal standards with the current NYS codes for residential construction and property maintenance and develop <u>a model set of recommendation for homeowners to build a replacement 3 bedroom home</u> (max. size is 1,800 square feet) in storm-affected areas.

The documents to be reviewed are

- FEMA Coastal Construction Standards
- Residential Code of NYS

- HUD Minimum Property Standards

- Property Maintenance Code of NY

Each group will develop a set of 10 key recommendation for a homeowner to follow to rebuild their home in compliance with the federal standards and the prevailing codes as adapted in the key jurisdictions and also identify adaptation of 5 innovative technologies from the Toolbase.org website that will enhance and reinforce the recommendation for resilient design features.

Conflicts between the standards will be identified and presented as part of the report, with recommendations on elimination of the conflict through use of alternate design or technical means. If there are no conflicts, identify the 10 most important guidelines that will reduce the potential for damage to the rebuilt house in the next superstorm.

PROJECT SUBMISSION REQUIREMENTS

Illustrated report: Document structure – cover page, executive summary, individual recommendations organized by Uniformat II categories; each individual recommendation adapting Toolbase.org format for technology diffusion. **Max length is 25 pages.**

Digital presentation: .pptx file with graphic illustrations of recommendations on Arch D size slides. Max length is 25 slides.

Infographic: .jpeg or .jpg file. An infographic is graphic visual representations of information, data or knowledge intended to present complex information quickly and clearly; **1 image no larger than 1000 x 4800 pixels**.

ELECTRONIC SUBMISSION REQUIREMENTS

1 pdf file with report.

1 .pptx file with digital slides.

1 pdf file of digital slides, $11" \times 17"$.

1 .jpeg or .jpg file of the infographic

Project 2 is Due March 11, 2015