SITED IN THE SETBACK - NEW OPPORTUNITY FOR FIRST RING SUBURBS

Levittown: Increasing Density through the Accessory Dwelling Structures

Specifications for Construction

- Walls - Structural
  - Wall Type: 6" SIPS Panel
  - Insulation: R-23

- Floors - Structural
  - Floor Type: 2x10 Timberstrand
  - Insulation: R-48

- Roof - Structural
  - Roof Type: 10" SIPS Panel
  - Insulation: R-38

- Exterior Finish
  - White Cedar Wood lap
  - BIPV standing seam steel
  - Solar Water Collectors
  - Triple Glazing, low-e, argon insulated

- Flooring Materials
  - FSC Certified Wood Flooring
  - 90% recycled content porcelain tile
  - Underfloor hydronic radiant heat system

- Energy/Utility
  - SUN HoMTM DHW Solar Water Tank (55 gallon) and Collectors (21 sqft)
  - Fresh air ventilation system
  - Heat recovery system in combination with mechanical ventilation
  - Hydronic cooling: steel window walls
  - Appropriate Energy Star rating
  - Sheet Metal Integrated Photograph Thin Film
  - Modular Green Roof
  - Replace existing asphalt shingles and increase insulation R value
  - Water management structures

- Sustainable Features
  - Passive solar heat with supplemental underfloor, hydronic radiant heat

- Environmental/Economic Benefits
  - Anticipated payback of 12 years for solar systems
  - Solar systems have a 25 year maintenance free life span
  - Minimal construction waste due to prefabrication
  - Use of durable low maintenance products that extend life cycle costs

- Storm water Management
  - Contain, control flow to foundation minimizes effects of storm water runoff
  - Pervious concrete, pavers, pavers and grass surfaces for permeable and robustness
  - Dry wells reduce storm water runoff and alleviate the storm sewer system

- Team Leaders
  - Meri Tepper AIA, LEED AP, M.Arch University of Virginia
  - 2004-present with Ryall Porter Sheridan Architects

- Collaborators from Ryall Porter Sheridan Architects
  - Ted Trussell Porter AIA
  - Ted Sheridan AIA, ASA, LEED AP
  - John Buckley
  - Sarah Jazmine Fugate

- Thesis Advisors at the University of Virginia
  - William R. Morrish, Dean, School of Constructed Environments
  - John Quale LEED AP, Associate Professor University of Virginia

Legend

- Section through a block
- Axon showing garden spaces

Text

- Build a Better Burb
- an idea competition to revitalize Long Island downtowns

Image

- Site Section through the block showing winter and summer sun angles

- Interior perspective of an accessory dwelling unit

- 1947 (no fences)

- 2010 Proposal - Stage 1

- 2010 Proposal - Stage 2

- 2010 Proposal - Stage 3

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- Site in the setback, the free plan living units recall the language of the horizontal fence line that it replaces. The living space is contrasted against the solar tower loft. Costing $125 a sqft, the house can be expanded through the addition of modular rooms. Likewise, the initial investment can be quite small with a simple studio space or family recreation room.

- Existing houses have been so built up that even the "dormers have sprung dormers". The trend is to encase the existing cape cod with a manufactured mini manor that reaches up and out to the maximum allowable building envelope established by the setback regulations.

- Original Levitt houses are on the market in 2010 for $300,000. 750 sqft of living space with an unfinished attic on 1/4 acre. This house sold for $7000 in 1947.