# RIVERSIDE RESIDENTIAL

CROWNSVILLE, MD

A waterfront retreat with the comforts of home in a compact, 20-foot-wide structure that fully embraces the eastern waterfront views.

#### **KEY DESIGN ASPECTS:**

- CHALLENGING SITE
  - Narrow, 30' x 98' (2940 sq.ft.) lot
  - Limited to 1,020 sq.ft. finished space by Anne Arundel County Health Department due to septic capacity
  - Steep slope with sandy soils
- EFFICIENCY OF SITE, EFFICIENCY OF SPACE, EFFICIENCY OF RESOURCES – MATERIALS, ENERGY AND WATER
- SUSTAINABLE DESIGN CHARACTERISTICS
  - New 22" thick 'smart slope' retaining walls to hold back sandy soils
  - Four rain gardens, a green roof, and rain barrels manage storm water
  - Zip-R wall substrate with integral 1" rigid exterior insulation eliminates thermal bridging of typical 2x4 wall framing.
  - Spray foam insulation throughout for maximum energy efficiency
  - 16 SEER VAV system with continuous ERV and whole house dehumidification system
  - Extensive LED lighting package supplements ample daylighting
  - Watersense plumbing fixtures
  - Bamboo flooring from renewable resource



# ORIGINAL 1930's STRUCTURE





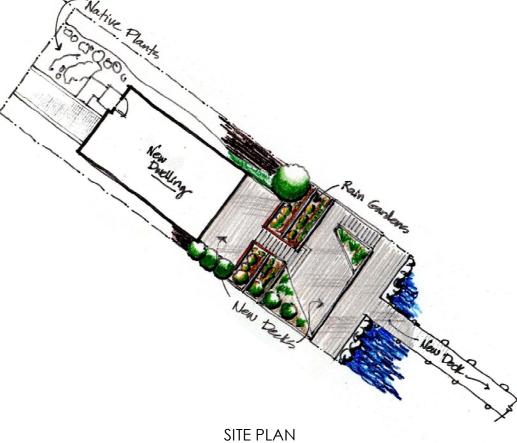


### TRANSFORMATION THROUGH FUNCTIONAL MANAGEMENT



#### A PATH FOR WATER:

- From the street to the river, every opportunity is taken to capture and treat water.
- Native plants filter the water and soften the entry sequence.
- Refurbished wine barrels were converted into rain barrels for storm water management.
- Rain gardens created by retaining walls with Smart Slope planted concrete masonry units - manage all the remaining water from the roof surfaces.



### TRANSFORMATION IN EFFICIENCY AND INTEGRITY

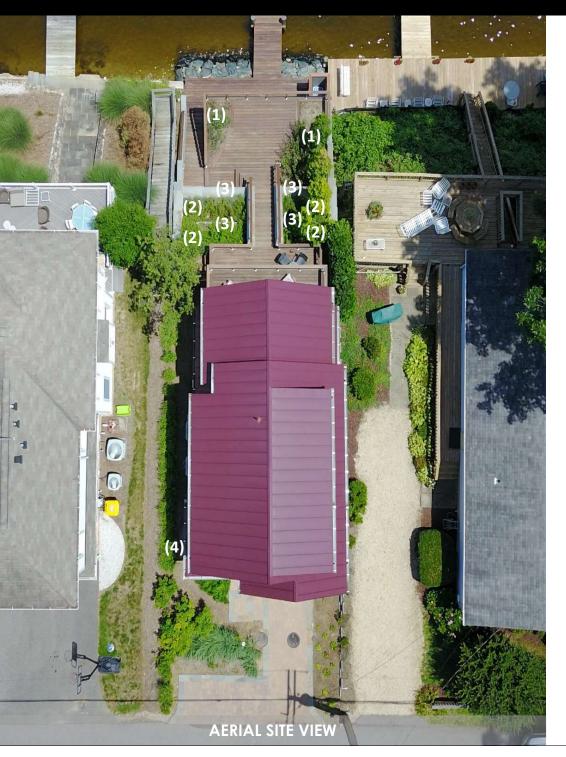


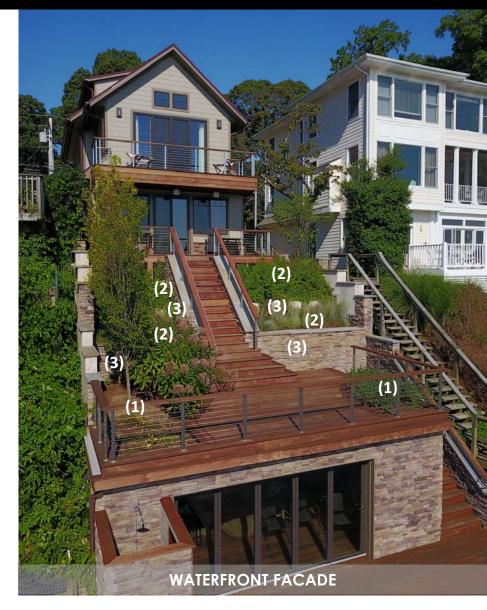


#### TINY SITE, EXPANSIVE VIEW

- A waterfront deck expands the Kitchen and Living Room functionality by integrating interior and exterior spaces.
- An Owner's Suite balcony provides amazing views of the Severn River vista
- The existing concrete bunker was reimagined with a planted roof perimeter, thereby creating usable "backyard" waterfront space
- Cascading Ipe stairs, stone walls, and cable rails provide a transition between the interior spaces and the waterfront.

## STORMWATER MANAGEMENT



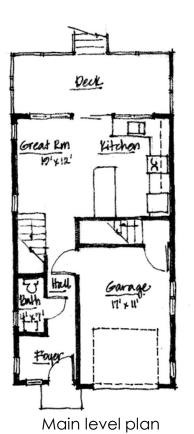


- (1) Planted roof deck captures rainwater and filters it at each end.
- (2) Downspouts lead to four rain gardens
- (3) 'Smart Slope' CMU planted wall system
- (4) Rain barrel at downspout
- \*All plants selected are native to Maryland\*

### TRANSFORMATION THROUGH FUNCTIONAL SPACES

#### COMPACT, FUNCTIONAL, SPACIOUS & COMFORTABLE

- Kitchen peninsula serves as Dining as well as hosting the recycle/trash bins and pantry storage
- Induction cooktop compliments the efficiency of the LED lighting
- Casual but refined Kitchen and Living space provide all the amenities of home. Bamboo floors and Cambria countertops are durable and require minimal maintenance.
- An under-stair storage conceals the whole house dehumidification system while adding functionality.







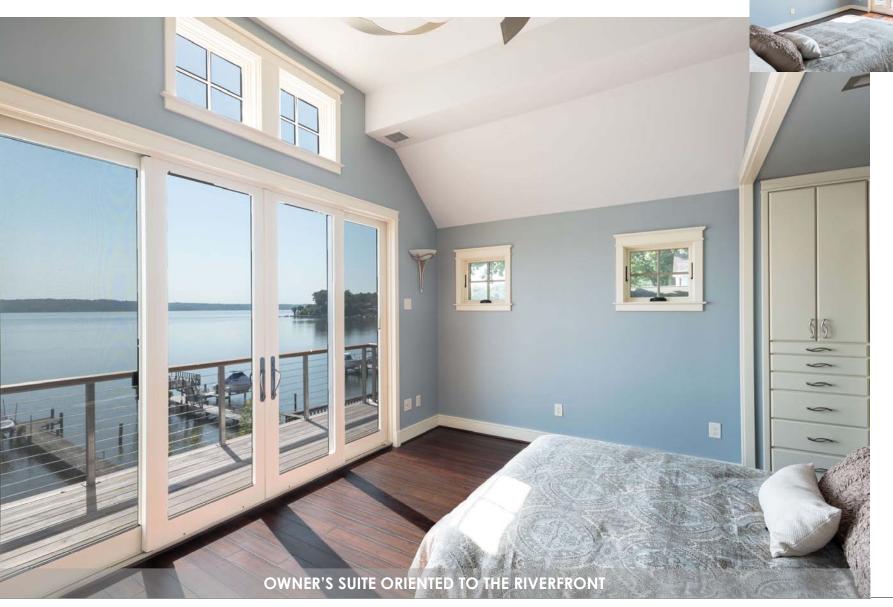




## OWNER'S RETREAT

### **HARMONIOUS WITH NATURE:**

- Expansive Severn River views make the room feel larger than it's 15x12 foot dimension.
- Orientation provides abundant daylighting, complimented by LED light fixtures.
- Built in storage minimizes the need for dressers & furniture that would clutter the space.



### AMENITIES OF HOME



- Owner's Suite bathroom blends cool watery blue recycled glass tiles with earth grounding stone floor and walls
- Watersense fixtures, LED lighting provide energy efficiency
- Heated tile floors add customized comfort
- Bath fans are specified for monitored dehumidification to maintain healthy indoor air quality in moisture prone areas.
- A window in the shower provides daylighting and a hint of the outside



# WATERFRONT MAN CAVE



A refurbished concrete bunker holds back the abundance of sandy soil. Ipe decking of the new pier and dock continues to the interior, and blends with the teak cabinetry. All materials below the mean water high tide are required to be submersible. Floating ceiling panels disguise the painted utilitarian ceiling, left as a visible reminder of the structural concrete bunker