

# DWELL GENERATIVE INC.

## Area Summary

Bahia Site Eight (8) Single Family 8X1400=11,200 SQ.FT  
Mystic Site Eleven (11) Units 12,340 SQ.FT

## Objective

The Generative Dwellingscape is a guideline and principle that maximizes agricultural land, develops healthy and holistic community cultural resources and finds the way to weave the residential development in harmony with surrounding natural environment serving as an active sustainable prototype for the neighborhood.

**Key 1-Maximize the farm land** If fully developed, the site will yield \$7,000 value of fresh organic food each unit. This approach would strategically work well with existing single access in the Mystic site. Nine single-family units are proposed in the Bahia site. The single-family house consists of two display education and consulting area for future participants. The manager for the farm land may be a full time job monitoring, regulating and providing guidance to the participants. The manager can stay in one of the units proposed in the sites if he/she desires. Senior citizens may volunteer for additional help in taking care of the farm land. The proposal envisions site with housing with small studio type units in the Mystic site keeping small footprint and disturbed area. The stepped back area, collected in retention pond and in multistory structure will provide ample terrace space ensuring fresh air, great east-south views and enough daylight in each unit. This approach would strategically work well with existing single access in the Bahia site. Nine single-family houses are proposed in the Bahia site. The single-family house consists of two volumes with open plan for flexible uses. The independent accessory dwelling unit can be occupied by the owner or by caregiver or used for rental.

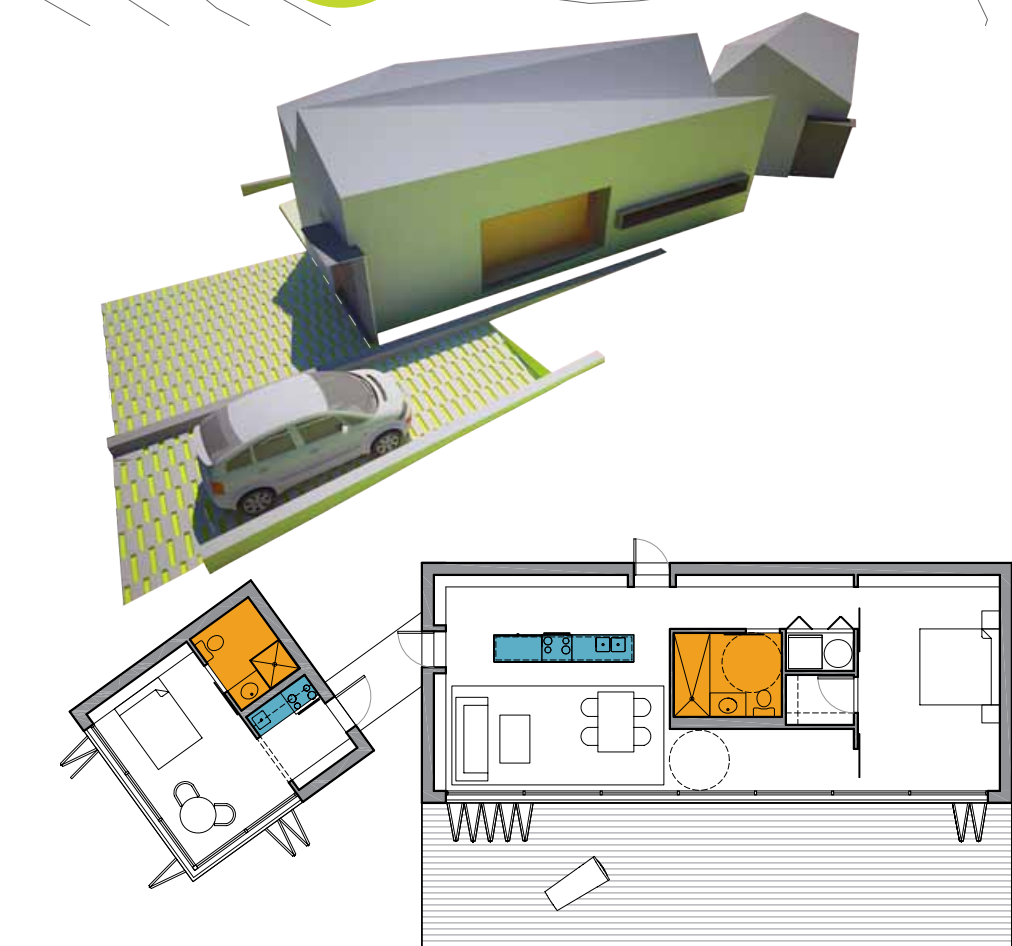
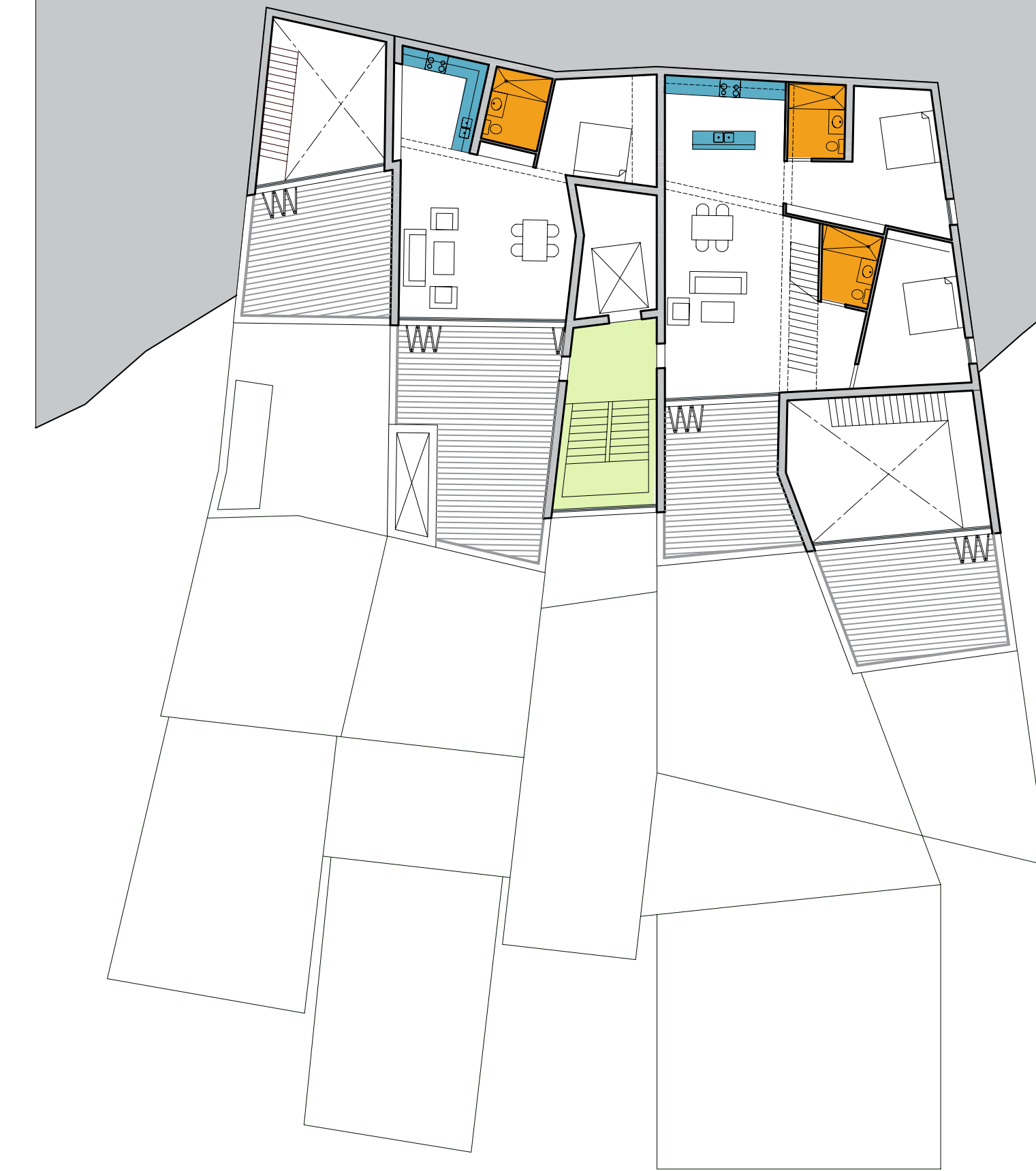
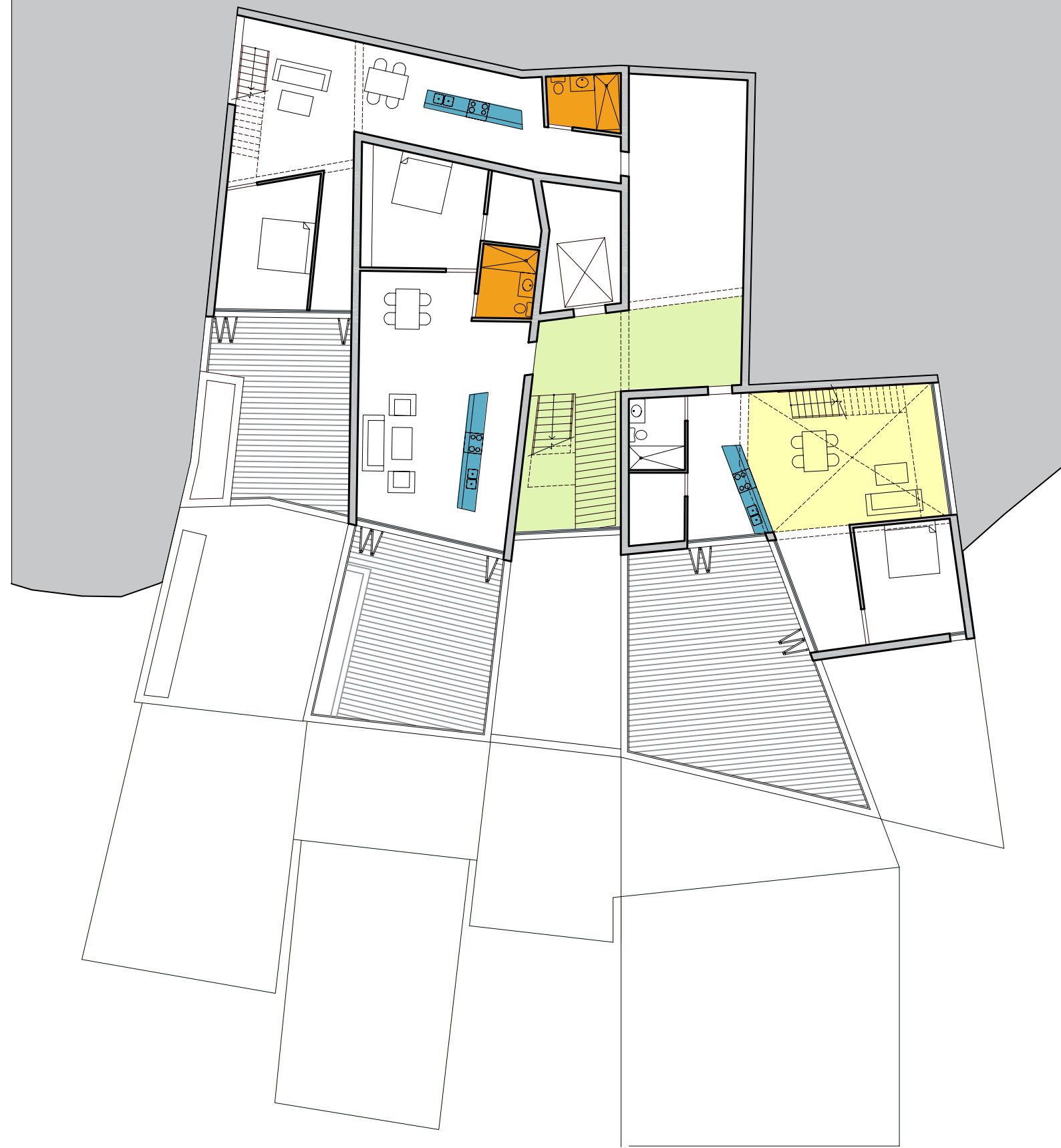
**Key 2- Recycle Water and Collect Wind and Solar Power** The landscape will allow the majority of rain water to return to aquifer through soil layer and the surface run off will be bio-filtered over the farm land and wooden area, collected in retention pond and in turn stored in the on-site cistern for irrigation uses. The total precipitation within the site each year is anticipated about 8 million gallon. The 3% of the total precipitation would meet the need for the irrigation assembly significantly reducing cooling and heating load for the site. Slagging two layers of 2-inch, 4-inch total, polystyrene foam insulation provide R-value of 20 and hermetic exterior wall construction would meet the need for the irrigation assembly significantly reducing cooling and heating load for the site. The ten of 10kW vertical wind turbine unit will produce 30-40% of the electricity needed within the newly developed community. Solar heat panels are recommended for the domestic hot water for its high efficiency.

**Key 3- Provide Good Insulation** Simply insulating well the building would cut down the energy cost of the housing significantly. And keeping the building volume compact will double the effect.

**Key 4- Secure Enough Daylight and Ventilation** In both sites, all units are facing either south or east. The units with this orientation will benefit the most from obtaining enough daylight during the winter and avoiding western sunlight during the summer which will otherwise add significant cooling load to the site.







BAHIA SINGLE FAMILY S. 1"=1/16"  
1450 SQ. FT. (1100SQ.FT MAIN UNIT+350 SQ. FT. FADU)



SECTION AT BAHIA SITE S. 1"=1/16"



SECTION AT MYSTIC SITE S. 1"=1/16"



MYSTIC HOUSING UNIT 1 1050 SQ. FT.  
 MYSTIC HOUSING UNIT 2 1300 SQ. FT.  
 MYSTIC HOUSING UNIT 3 1500 SQ. FT.  
 MYSTIC HOUSING UNIT 4 1100 SQ. FT.  
 MYSTIC HOUSING UNIT 5 1150 SQ. FT.  
 MYSTIC HOUSING UNIT 6 1800 SQ. FT.  
 MYSTIC HOUSING UNIT 7 1250 SQ. FT.  
 MYSTIC HOUSING UNIT 8 880 SQ. FT.  
 MYSTIC HOUSING UNIT 9 1400 SQ. FT.  
 MYSTIC HOUSING UNIT 10 800 SQ. FT.  
 MYSTIC HOUSING UNIT 11 1100 SQ. FT.



BAHIA SITE SINGLE FAMILY INTERIOR

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MYSTIC SITE HOUSING UNIT TERRACE LOOKING UP THE FARM LAND