GENERATIVE PROCESS: "Courtyards Which Live"

The proposal is a detailed design and building **process**, illustrated by this schematic design as one application of the process. This design was done by six individuals -- three women and three men, four being parents with one grandparent, and input from children.

The process includes a **pattern language**, to provide specific configurations from the project brief; a **generative sequence** that guides specific layout steps to take; **a form language**, to provide specific geometric shapes and motifs; specifications for **carbon neutral and ecological design**, and for perpetually **affordable ownership**; and innovative strategies for flexible and cost-effective ownership and financial management.

These tools guide a **collaborative process** that can be applied to this or other sites, adapting to the needs and concerns of families in a low-carbon and high-livability future. In particular, they address challenges of urban living for families. Such generative processes can be applied incrementally at a range of scales to transform a block, a neighborhood or a city.

SUMMARY: Portland Infill Site 100'x100' * 8 Units: 578SF/568SF/970SF/961SF/1018SF/978SF/1231SF *7,576 SF Total * Coverage = 49% * Max. Height = 36' - 6" * Parking for 6 Standard,3 Electric, 1 Flexcar * Bike Storage * 1 Accessible Unit * All Units Visitable * All Common Areas Visitable * Compost * Roof Gardens * LEED-H and LEED-ND Standards

PATTERN LANGUAGE

The project brief has been translated into a project pattern language with the form [title] [uplinks] [problem] [discussion] [downlinks].
Example:

❖ **Front Yard Play Area**
Parents need to be able to see children while they play. But children need to be able to play outdoors, in an area that is not isolated.
Therefore, create a small front yard area off the courtyard. Place the kitchen window nearby, so adults can monitor ([Kitchen Looking Onto Yard]).

Other patterns: Porch Transition * Private Outdoor Space * Entry with Storage * Roof Garden * Balconies * Laundry Upstairs * etc.
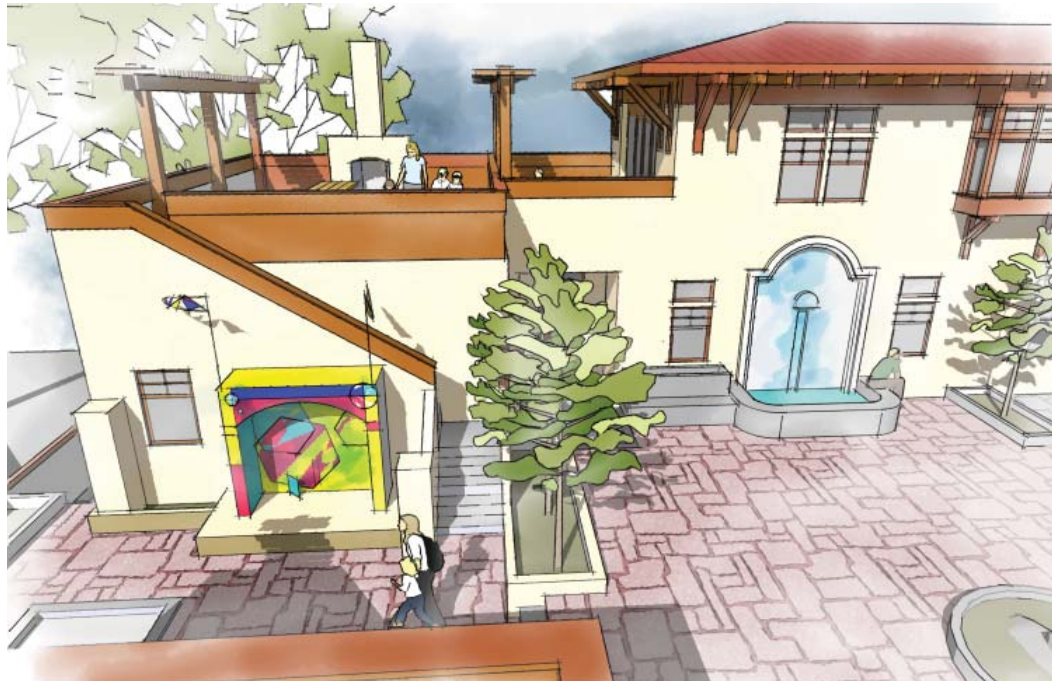
GENERATIVE SEQUENCES

Participants follow stepwise sequences to delineate larger-scale spaces and gradually articulate smaller-scale elements, while incorporating the project pattern language. Gradual adjustments are made throughout.
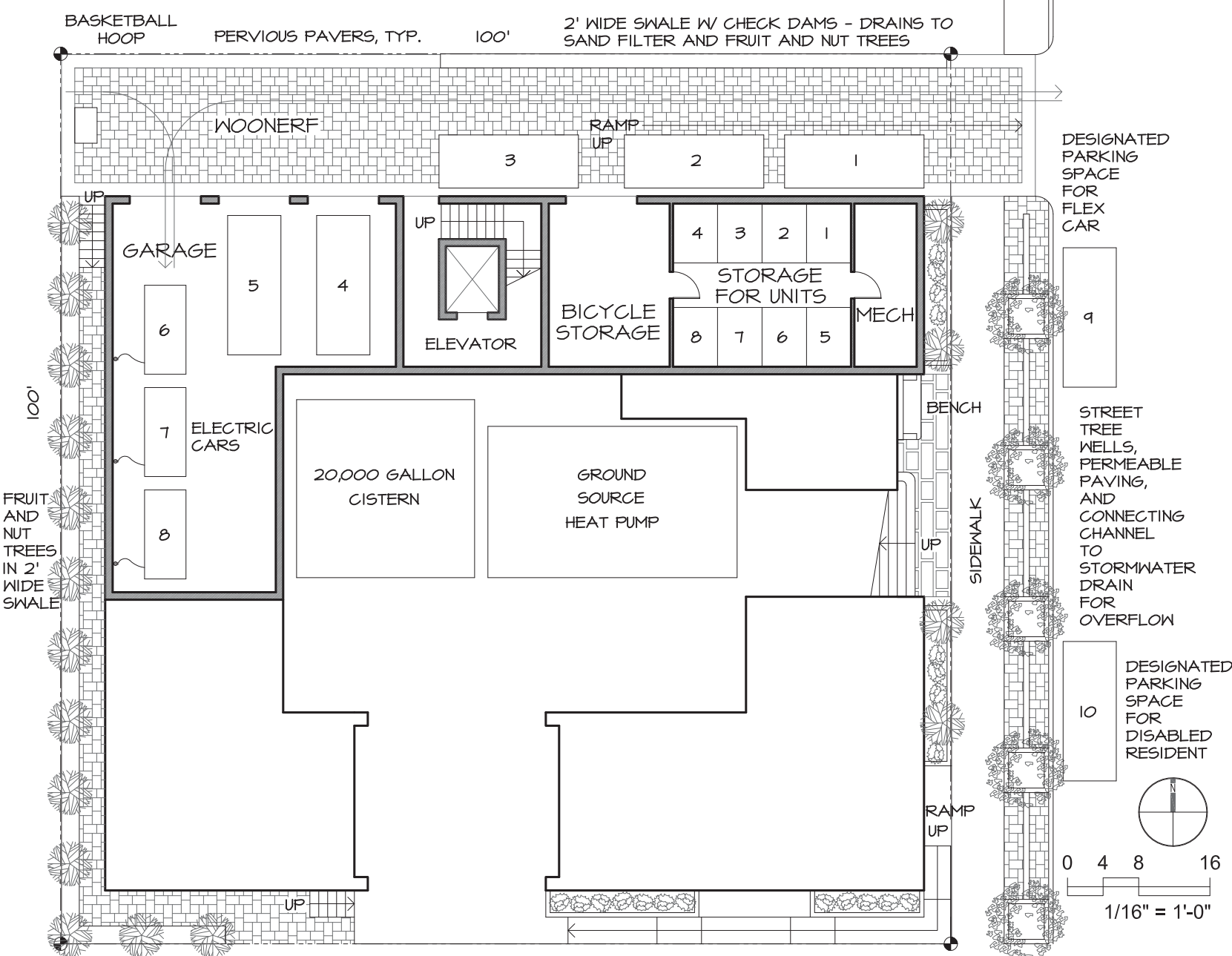
Example: *Make initial diagnosis; identify site forces; identify latent centers; identify urban connections and future growth; shape main courtyard; approximate building volume; locate entrance;lay out parking needs; demise dwellings; shape entries; shape porches and balconies; shape roof terraces; articulate courtyard elements; articulate building forms and details; articulate landscape features and other details.*
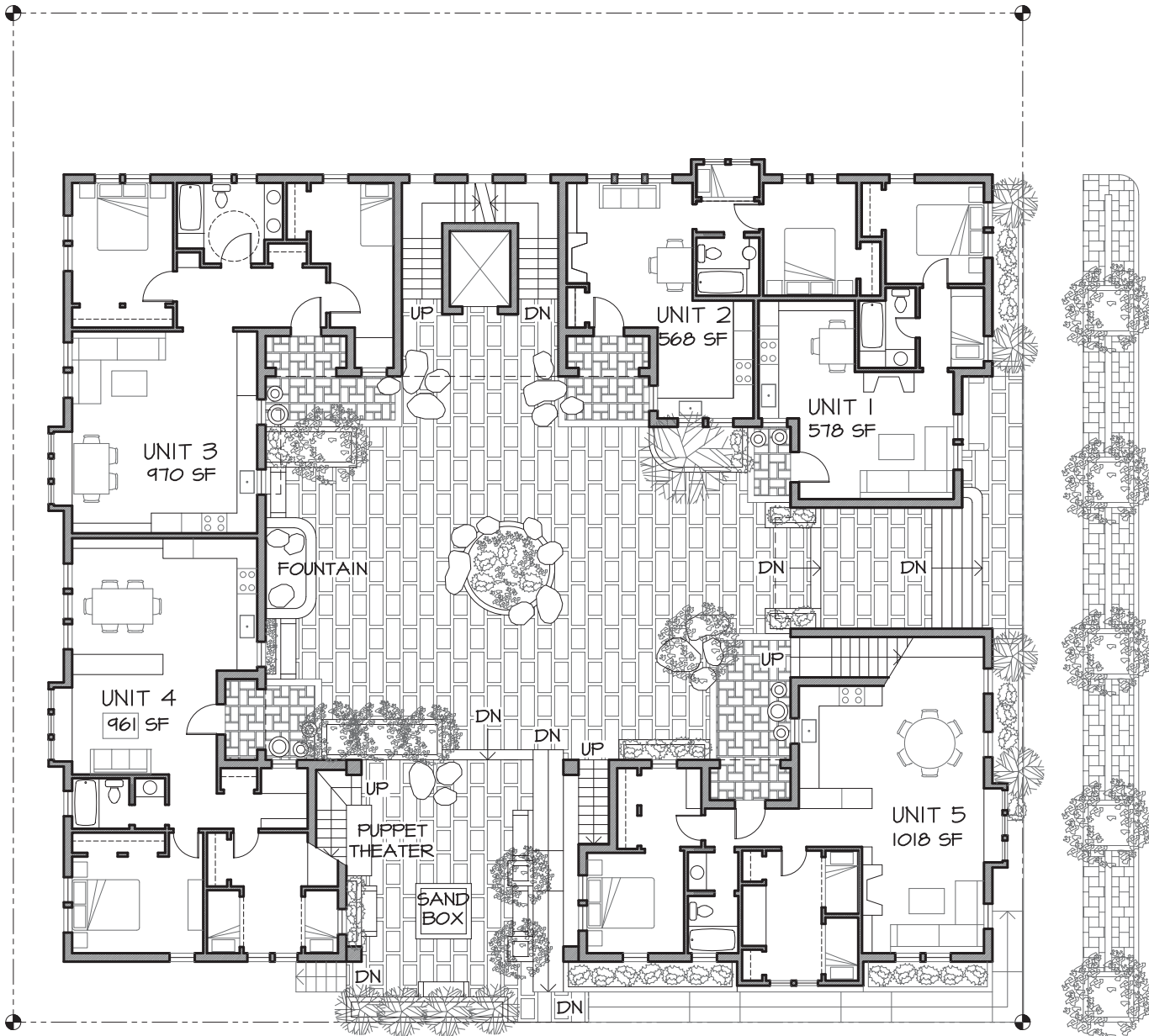

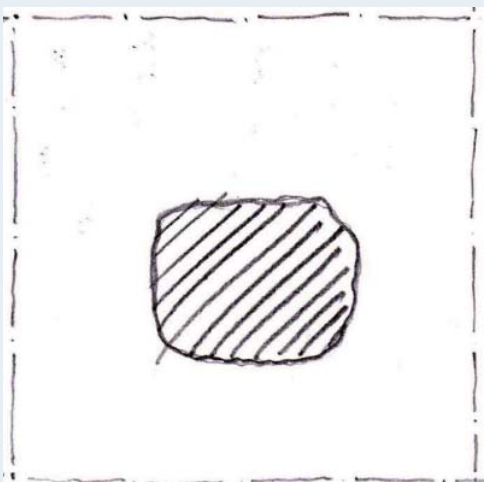VIEW OF MAIN ENTRANCE AND COURTYARD FROM THE STREET

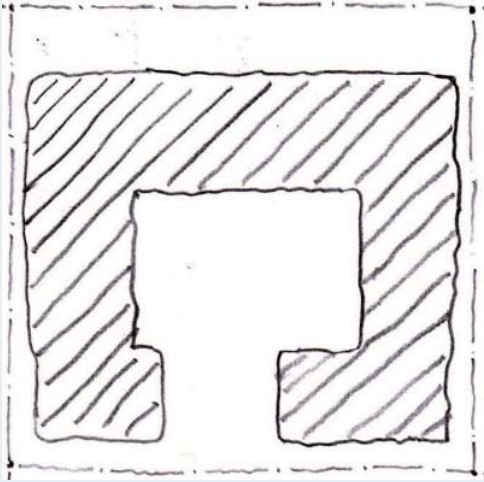INTERIOR VIEW OF COURTYARD FROM UPPER TERRACE SHOWING PUPPET THEATER AND FOUNTAIN
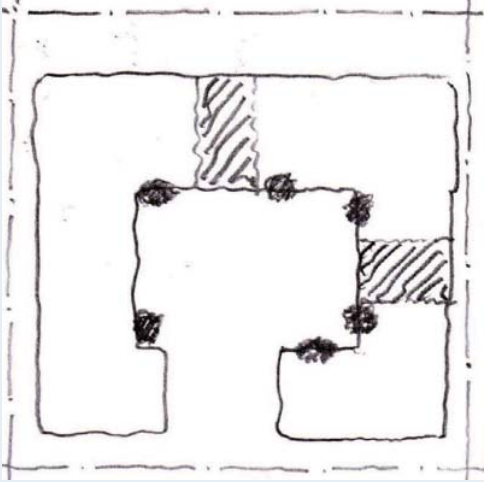

GARAGE FLOOR PLAN
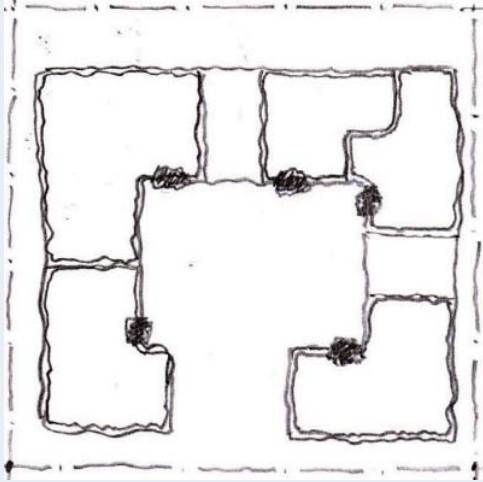

GROUND FLOOR PLAN

STEP 1: COURTYARD
Place the courtyard.

STEP 2: BUILDING VOLUME
Locate the volumes of the building around the courtyard.

STEP 3: ENTRANCES
Place the entrances to create life in the courtyard,

STEP 4: UNIT AREAS
Place the individual units relative to the entrances.

GENERATIVE SEQUENCES: FROM INDIVIDUAL SITE TO UNFOLDING CITY