

GUIDING PRINCIPLES

- All dwelling units touch the earth and touch the sky.
- High quality spaces, interactions and life will result.
- Inhabitants set roots, are sustained and reach aspirations.

COMMUNITY

- Community spaces encourage privacy, social interaction and mutual support among families - spaces purposefully range from the individual room to family dwelling to clustered families to the entire village.
- Street entry sequence moves from street to sidewalk to porch through a "postage stamp" garden to individual dwelling entries to shared porches.
- All units are organized to maximize eyes on the street and eyes on the family outdoor areas.
- Spatial organization bolsters a sense of safety and mutual responsibility for all residents.
- Proposal interweaves with Fairfax neighborhood through pedestrian paths.
- Modular approach balances flexibility, economy and fine grain scale of the Fairfax neighborhood.
- Combinations of modules can be inserted in the Fairfax neighborhood in the form of 2, 3 or 4 family dwellings.

SCHEMATIC COST ESTIMATE

SITE DEVELOPMENT COSTS	UNIT COST	UNIT	TOTAL
SITE UTILITIES	\$3,000	50	\$150,000
PERMITS	\$2,000	50	\$100,000
SEWER/STORM	\$4,175	27,000	\$112,725
COMMON LANDSCAPE	\$75,000	50	\$3,750,000
TOTAL			\$4,112,725

UNIT OUTDOOR SPACE	Cost Per Module	# of Units	Total Cost
Back Porch	\$1,800	50	\$90,000
Front Porch	\$5,000	50	\$250,000
Front Yard	\$5,000	50	\$250,000
Back Yard	\$2,200	50	\$110,000
TOTAL			\$700,000

BASIC BUILDING BLOCKS	Cost per SF	Area per Module	Cost per Module
Bedroom Module	\$60	500	\$30,000
Living Room Module	\$80	500	\$40,000
Dining Room Module	\$80	500	\$40,000
Bathroom Module	\$75	500	\$37,500
Kitchen Module	\$90	500	\$45,000
Whole House Module	\$100	500	\$50,000
TOTAL			\$242,500

BUILDING CONFIGURATIONS	# of Buildings	Building Cost	Total Cost
(1) 2-BR/1-BA	1	\$250,000	\$250,000
(1) 3-BR/2-BA	1	\$350,000	\$350,000
(1) 4-BR/2-BA	1	\$450,000	\$450,000
(1) 5-BR/3-BA	1	\$550,000	\$550,000
(1) 6-BR/3-BA	1	\$650,000	\$650,000
TOTAL			\$2,650,000

UNIT SUMMARY (3E)	Size SF
Unit Type	750
(1) 2BR/1BA	900
(1) 3BR/2BA	1050
(1) 4BR/2BA	1200
(1) 5BR/3BA	1450

COMMUNITY AMENITIES	Cost
Community Building	\$187,275
Meeting Room, Kitchen, Bathroom, Storage	
Small Community Building	\$67,810
Lobby, Storage Room, Conference Room	
Pool	\$25,000
Program	\$12,000
Basement	\$11,000
TOTAL	\$303,085

PROJECT COST SUMMARY	Cost
Building Sub Total	\$3,215,750
Unit Outdoor Spaces	\$700,000
Site Development Costs	\$4,112,725
Community Amenities	\$303,085
SUB TOTAL	\$8,331,560
Soft Costs 20%	\$1,666,312
Total Development Costs	\$10,000,000
Average Cost Per Unit	\$131,353
Energy Star Rebates per Unit	\$1,500
Net Average Cost Per Unit	\$129,853



FIRST FLOOR PLAN



SECOND FLOOR PLAN



FLEXIBLE, HIGH QUALITY UNITS

- Dwellings are made from 6 to 9 flexible, interchangeable, 150 sf modules.
- Each dwelling has a two story space for ventilation, light and quality.
- All living spaces within a unit are single level for accessibility.
- South building face takes day light deep into units, catches solar warmth in winter, porches and overhangs shade openings in summer.

SUSTAINABLE STRATEGIES

- ORIENTATION AND FORM**
 - Each unit has a two story space for passive ventilation, cooling and for gathering solar heat.
 - Compact, high performance envelope reduces first cost and operational costs.
 - North-south orientation maximizes solar collection, minimizes western exposure, and takes advantage of south-westerly prevailing winds.
 - All living spaces have cross-ventilation through adjacent walls and/or roof.
 - Deciduous street trees along south edge allow winter sun and shade summer sun.

COOLING AND HEATING

- No "air conditioning" required. Ventilation, cooling and de-humidification provided with diurnal air circulation. Hot air rises and passively ventilates high spaces. ERV/dehumidifier system in bathrooms.
- Heating: passive solar gain in winter reduces heating loads. Radiant hot water heat is distributed low in the spaces and ceiling fans circulate air.

WATER MANAGEMENT

- Roof water is collected, stored and directed to toilets for gray water flushing.
- Dry lay pavers for hard surface areas and decomposed granite paths for maximum permeability.
- Water permeable material in parking areas to reduce run-off.
- Dual flush toilets
- Combined solar and tankless hot water heater

ELECTRICAL

- Well-placed windows bring daylight deep into the spaces to minimize use of electrical lighting.
- Photovoltaic panels to be added to roof surfaces when applicable funds are once again available through Ohio rebate program.

MATERIALS AND APPLIANCES

- Use of recycled, low embodied energy, locally sourced materials such as: engineered/pre-finished hardwood floor, recycled content carpeting and padding, low VOC paint, sustainable wood cabinets with wheat board boxes, high quality insulated windows, recycled cellulose insulation, cementitious siding, recycled roof material, Energy Star appliances.

CONSTRUCTION TECHNOLOGY AND AFFORDABILITY

- Modular technology combines off-site prefabricated panels and modules to make the best use of pre-manufactured and site built elements
- Modular technology offers: reduced waste, reduced construction time (saves cost), high quality control, wall panel modules and smaller volume modules offer reduced transportation costs, maximizes skill-sets.

ACCESSIBILITY

- Each unit is completely located on one floor - no internal split or dual levels.
- Units are 50/50 grade and second floor.
- All paths, electrical devices, bathrooms and kitchens are accessible per the Fair Housing Act Accessibility guidelines.

