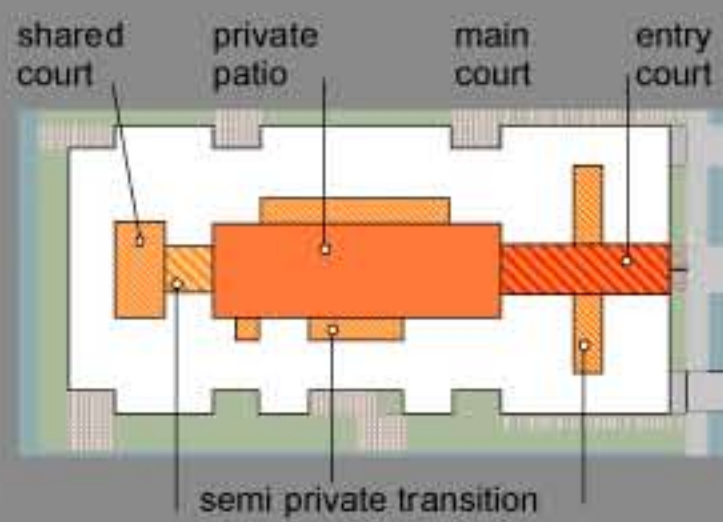


**EAST PORTLAND INFILL
HELIOS**

This strategy for economical infill housing interprets the traditional typology for contemporary and sustainable multifamily habitation with an expanded range of privacy and diversity of spaces. Three courts serve three clusters of units, all entered from the main, axial path. A range of housing types provides for a diverse population of families, young couples and elders. Prefabrication combined with on-site construction provides an efficient and cost effective method for building.

AREA TABULATION			
UNIT TYPE	#	LIVING	BALCONIES/TERRACES
A	1	2,089	440
B	1	2,089	440
C	2	1,289	88
D	2	1,378	176
E	2	2,044	264
F	3	1,155	116
G	1	1,333	116
TOTAL	12	18,398	2,400
GARAGE		3,100	
EXT. STAIR			208
TOTAL BLDG AREA		21,498	2,608
LOT COVERAGE		10,086	59%
MAX. PARAPET HT		33'	



The contemporary adaptation of the traditional courtyard typology includes a broad spectrum of public-private spaces with multiple transitions between them, allowing choice of involvement.

Units are composed of three elements:

- An 80" x 160" site built masonry stairway grounds the buildings.
- An 80" x 160" prefabricated utility module attaches to a site built plumbing wall which consolidates all vertical services.
- A family of 160" living modules of varying lengths form undifferentiated spaces which are freely adaptable to different uses over time.

The efficient 40" grid, based on the human dimension, provides an efficient planning tool compatible with 10' & 12' standard building materials. Modules are assembled in a variety of configurations to accommodate site circumstances and program requirements.



main court from east



view from west

SITE PLAN

The site is structured as a three dimensional assembly of public and private open space arranged around the main courtyard.

The semi-public realm is formed of a sequence of three courtyards--entry court, main garden court and rear court--which increase in privacy toward the rear. One passes through a narrow, compressed "zaguan" into the main sunlit landscaped garden court following a waterway from the street to a small fountain in the common rear court.

Semi-private courts and porches form transitions to the units, while private balconies and roof terraces overlook the main court. At the site perimeter, private fenced rear gardens are provided for most units.

The plan gives priority to sun exposure for both the main garden and the units. The proportions of the main court allow sun into the court at winter solstice. Stair and utility cores are placed to the north or between units to give living space maximum advantage of the sun.

All units benefit from daylight from at least three sides and through ventilation, enhanced by the chimney effect of openings at the top of the stair tower.

REAR COURT: A small shared court provides transition to the four rear units. Numerous private exterior spaces are also provided in the form of private rear patios, while private roof terraces and balconies overlook the main courtyard.

MAIN COURT: The main garden court has large 3 bedroom family units. Unit A demonstrates adaptability for a ground level rental or in-law apartment, while Unit B demonstrates a ground level in-law bedroom. Proportions are designed for winter sun penetration with the main fountain as its focus.

ENTRY COURT (zaguan) The compressed entry passage, a shared pedestrian/auto space provides transition to the street. Stairways form a privacy interval for four smaller upper "urban" units suited to live/work.



DENSITY: Twelve primary units achieve a density of thirty units per acre, in a balance between the existing low density neighborhood and an essential long term transition toward a more urban density which supports local services and transit development.

WATER: A green roof absorbs rainfall and protects the roofing membrane. Roof drainage is directed into a series of basins for temporary storage and gradual dispersion in the permeable courtyard. An axial runnel follows the main path, carrying overflow to a grassy swale at the sidewalk. The central fountain with adjacent seating is positioned for maximum sunlight and provides masking sounds and evaporative cooling.

THE CAR: The project anticipates reduced reliance upon the private automobile and its impact on the site is restricted to actual storage space. The garages are designed to be incrementally converted into living or working space. Two garages initially dedicated to adjacent units A, B, G, & H are for association managed car-share which allows tandem arrangement. These cars back to the street as a minor inconvenience to benefits for the overall site development.

