

First place

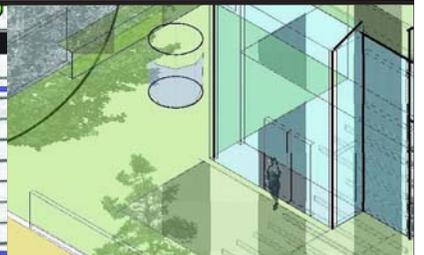
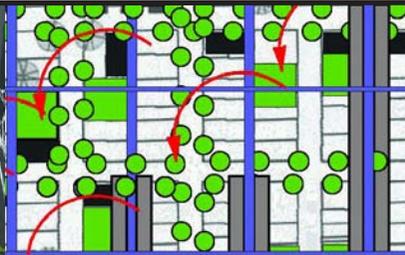
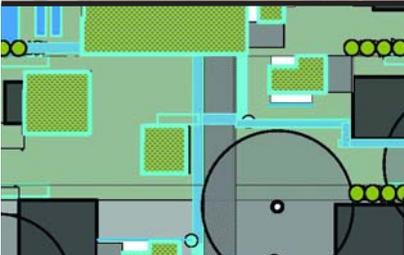
CATEGORY

3

Nature in Neighborhoods: Integrating Habitats Winners Series

Neighborhood infill development and oak woodland

Urban savannah, Alley midlands, Understory dwellings



Elastic alley

Common greens

Entry greenhouses

Urban-scale restoration

Flyway canopies

Forest functionality

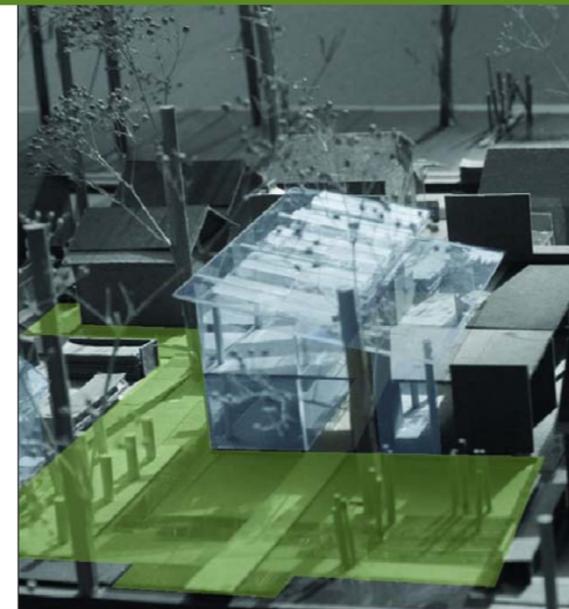
Let the sun shine in





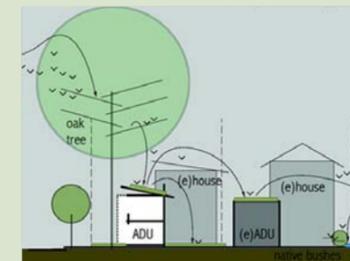
Snapshot of a winner

Urban Savannah, Alley Midlands, Understory Dwellings showcases an infill development project with substantial open space and access to natural areas. This design allows for smart growth that contributes to the unique identity of the region and improves neighborhood character and livability. When projects include features that improve habitat and water quality, it also enriches lives by making people and their properties a key part of something bigger: watershed health.



③ Entry greenhouses

Each dwelling is designed with a south or west-facing greenhouse (or solarium) courtyard and winter garden. These vibrant spaces increase access to natural daylight, create visual connections between the inner and outer living areas, and provide wind and weather-sheltered gardening space for residents year-round. Passive heating and cooling, as well as natural stack and cross ventilation, save money and resources, reduce energy use and improve indoor air quality.



⑤ Flyway canopies

Landscape and building design create a connected canopy of trees and green spaces. This connectivity provides 'flyways' or corridors through the neighborhood, where birds migrate, rest and find food.

Savannah, midlands, understory:

Native habitats form the basis of a new integrated urban landscape.

Inhabitant profiles



Oregon iris (Curt Zonick), Fence lizard (Curt Zonick), Western scrub jay (U.S. Fish and Wildlife)



② Common greens

Each block features large neighborhood common greens where residents access sustainable amenities and activities like wildlife and birdwatching platforms, small fruit and tree orchards, community gardens, apiaries for honey production, oak savannah restoration projects, stormwater art, and seasonal celebrations or markets.

"To me, the most memorable aspect is the way each individual dwelling connects to nature and its processes." – Susan Szenasy, jurist

"Density is created quite successfully by activation of the deeper parts of the yards and a center alley. The community center allows for a vibrant dense development with enough green to keep the 'neighborhood' qualities alive." – Stefan Behnisch, jurist

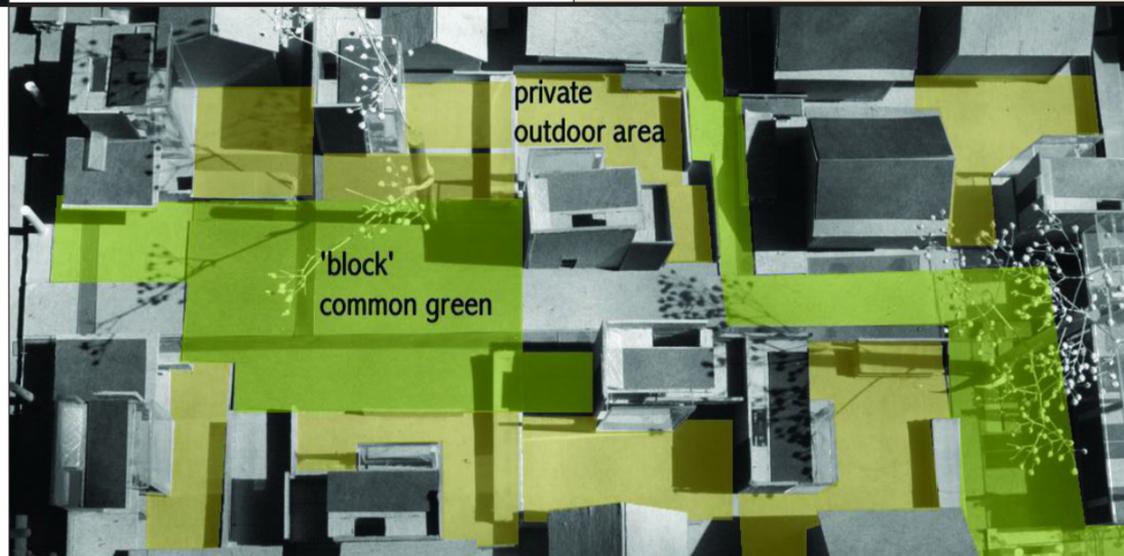


⑥ Forest functionality

Swales, ecoroofs, green walls, cisterns and rain gardens provide ecosystem services similar to a forest, collecting and absorbing rainfall and cooling and cleaning the air.

① Elastic alley

The alley's infrastructure can evolve and change, accommodating phased growth and improving wildlife habitat connectivity over time. Elastic alley dimensions vary, as do the building types, architectural styles, and connections between public neighborhood commons and private residences. The nature-friendly design and diversity in visual and spatial alley landscapes slows traffic, improving safety and access for bikes, pedestrians and wildlife.



④ Urban-scale restoration

A healthy understory of native plants weaves throughout the community. Oregon grape, bearberry, and nootka rose flower among pearl everlasting, yarrow and aster, offering food and shelter for many species of wildlife—birds, mammals, amphibians, and insects. Planted by humans, maintained by nature, and used by local fauna, this understory is an urban-scale restoration project that can be replicated on small lots, in back yards and throughout neighborhoods.



⑦ Let the sun shine in

Tall, awkward buildings and 'overcrowding' are often associated with infill development. But nature-friendly design can maintain access to natural light, views and nature, creating vibrant shared and private spaces.

First place

Neighborhood infill development and oak woodland

Historic habitat guides infill design
It is estimated that less than 1% of the historical extent of Oregon's oak woodlands and savannahs still exist in small, scattered patches. In the Portland-metro region, oak trees and woodlands can be preserved, restored and reintegrated with existing and expanding urban development. Nature-friendly urban features and infrastructure connect with the flyway canopy through native backyard plantings, neighborhood-scale restoration projects, pocket parks, and larger common green spaces. Vegetated understories and building design provide for diverse human uses and create wildlife habitat throughout the neighborhood.

Team members

Constructive Form Architecture & Design LLC
Portland, OR

Simone Goldfeder
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Kina Voelz
Brent Hinrichs
Jacob Carlisle

“This design shows an understanding of not only the specific requirements of infill development, but of the context in which infill occurs—the relationship of the neighborhood and the regional context of the urban savannah.”

—James Winkler, jurist

Jurists

Stefan Behnisch, principal
Behnisch Architects
Stuttgart, Germany
and Venice, Calif.

Joan Nassauer, professor
Landscape architecture
University of Michigan
Ann Arbor, Mich.

Tom Schueler, founder
Center for Watershed Protection
Ellicott City, Md.

Susan Szenasy, editor-in-chief
Metropolis Magazine
New York, N.Y.

Jim Winkler, president
Winkler Development Corporation
Portland, Ore.

David Yocca, director
Conservation Design Forum
Elmhurst, Ill.



Nature in Neighborhoods:
Integrating Habitats Winners Series

category 3: neighborhood residential infill development/ remnant oak woodland savannah habitat

URBAN SAVANNAH

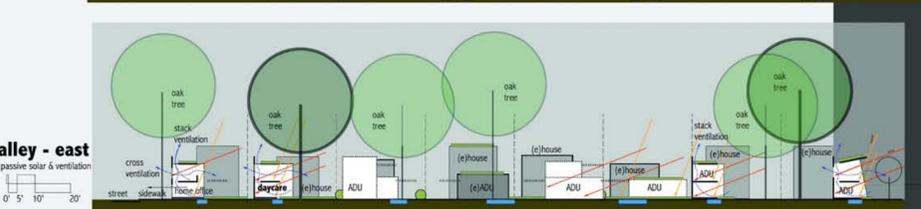
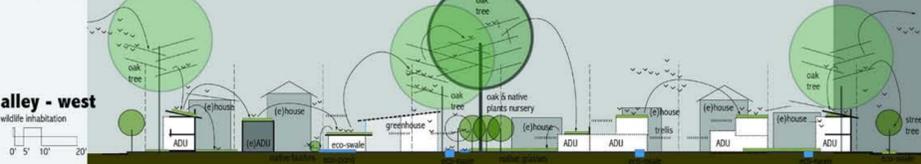
HABITAT **"integrated" urban habitats:** native and regional white oak woodland and habitat preservation, restoration and re-integration with existing and expanding urban fabric; the restored and preserved landscapes link the flyway canopy and connect the remnant oak woodland habitat, triangle park, city park, city streets and neighborhood blocks; all remnant oak woodlands are preserved, with housing, accessory dwelling units and small-scale potential uses (e.g. daycare) are designed around existing and future oak canopy and understorey.

TERRITORY **"linked" wayfinding:** oak canopy and restored native perennial "tracks" provide interconnected wildlife habitat and wayfinding; neighborhood parks, block common greens and existing new oaks on residential lots provide "shelter" and resting points.

MOVEMENT **"extend" large neighborhood common greens at each block:** proposed neighborhood common greens, located within each city block, allow for communities and block residents to designate a "shared common" which best meets their needs and aspirations; potential common greens might include: riparian stormwater zone for each block; beaching platforms at tree canopy heights; oak savannah restoration; preservation where existing oaks are located; neighborhood meeting halls; and/or community center, community workshops, community gardens and food sheds; small fruit and nut tree orchards; honey production/queues, chicken coops; recreation space or pervious sport surfaces.



low impact "alley commercial development": proposed small scale low impact commercial development along existing alleys adjacent to the existing commercial development; the accessory alley buildings have the potential to be used as home office, studio, workshops, alley cafes or daycare. these small scale commercial and potential retail uses could filter into the neighborhood further to the north as demand and need grow, including corner markets, restaurants, hardware stores, etc.

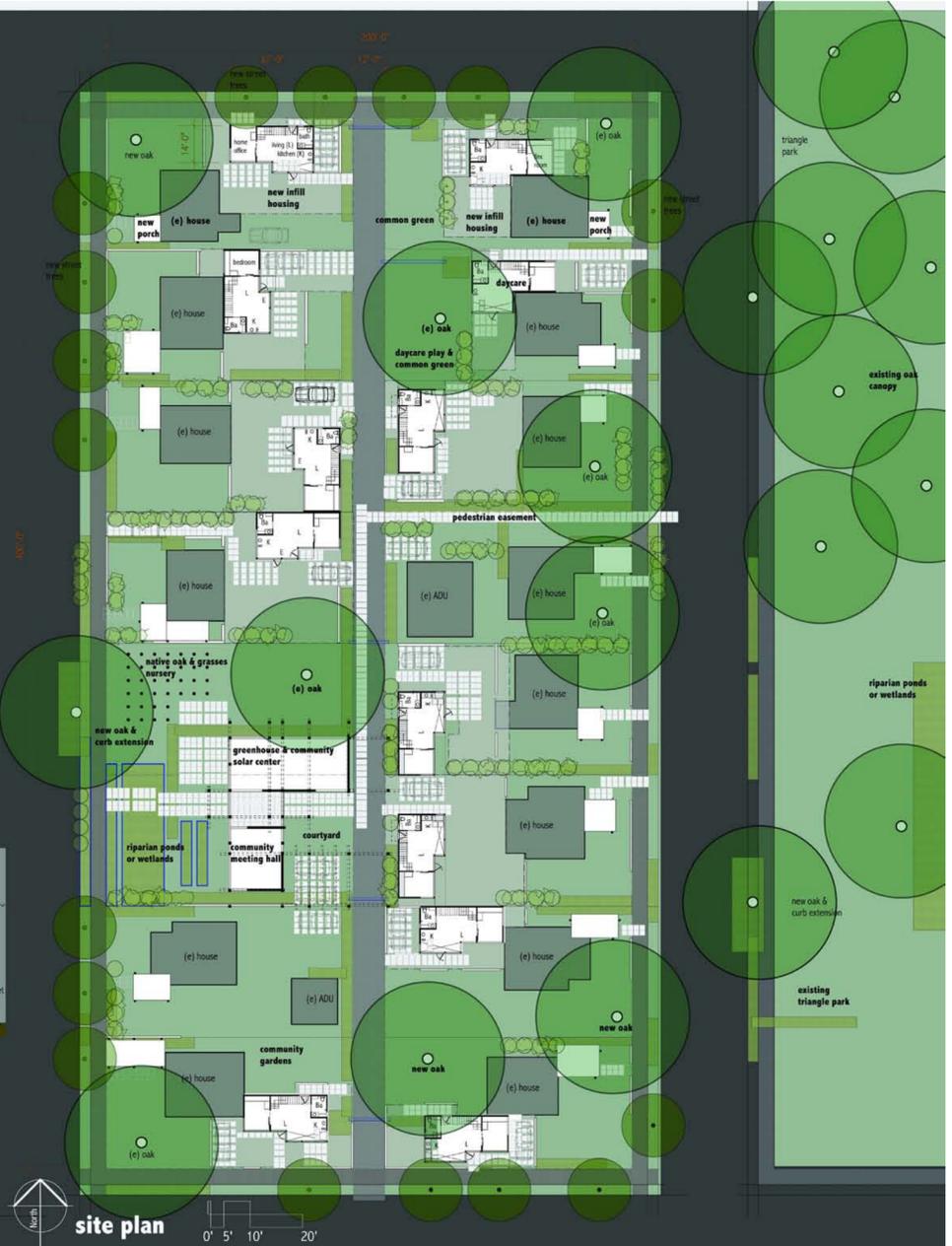
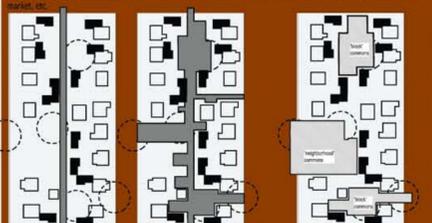


ALLEY MIDLANDS

"elastic" alley: a "breathing" alley with varying widths, sections, setbacks, building types and architectural styles, with "semi-public" block "public" neighborhood commons and "private" residences; the smaller scale, variegated visual and spatial landscape of the alley allows wing, foot and wheel traffic and provides potential for a range of uses.

"optional" block movement: use of existing street and alley infrastructure for primary car, bike and pedestrian access through north-south block; use of new mid block/ east west easement for bike/ pedestrian movement; public "park commons" locations and wildlife habitat connectivity.

"shared" semi-public open space within each city block: common open space (s), with clustered accessory dwellings, which each block located around existing and restored oaks and savannah; commons could be used for a range of potential uses - a daycare play space; accessory dwelling used as daycare; community gardens; neighborhood farmer's market.

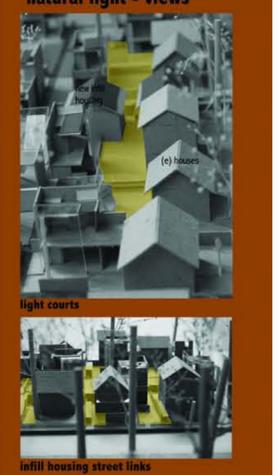
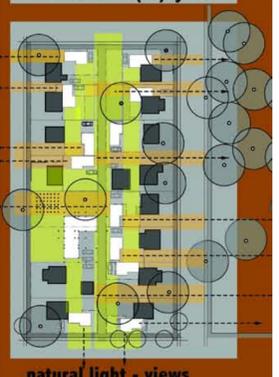
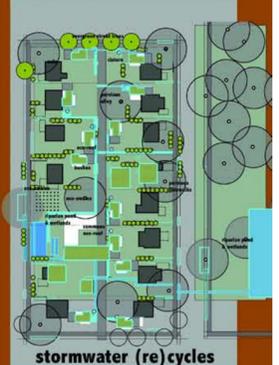
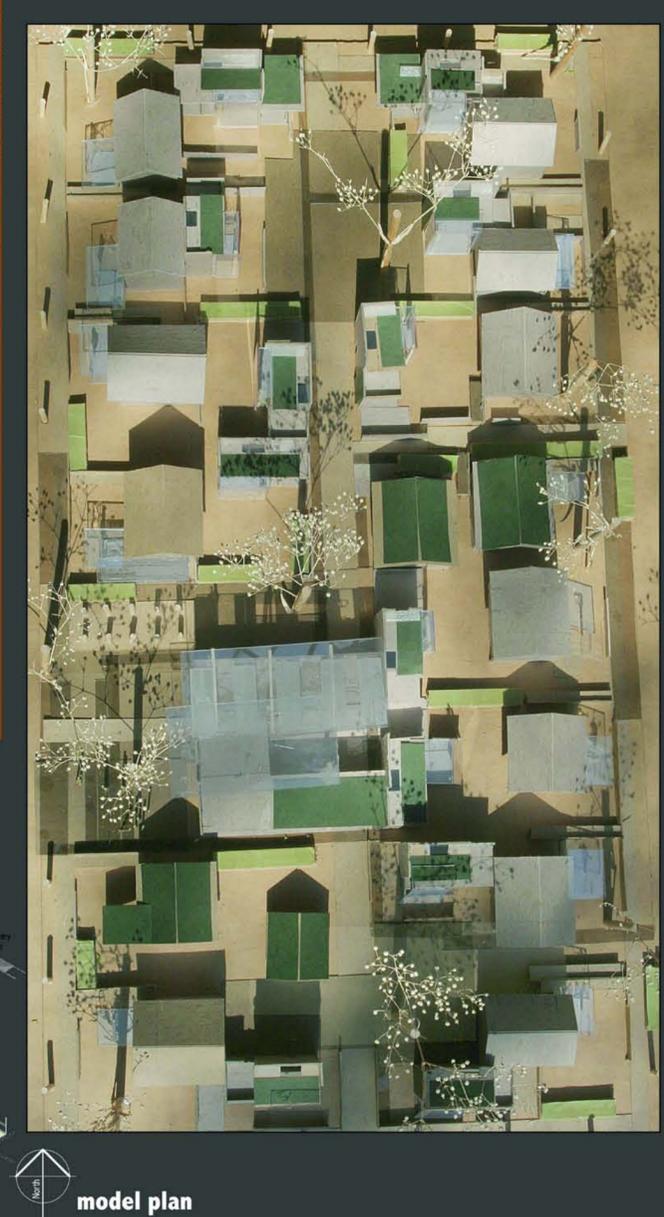
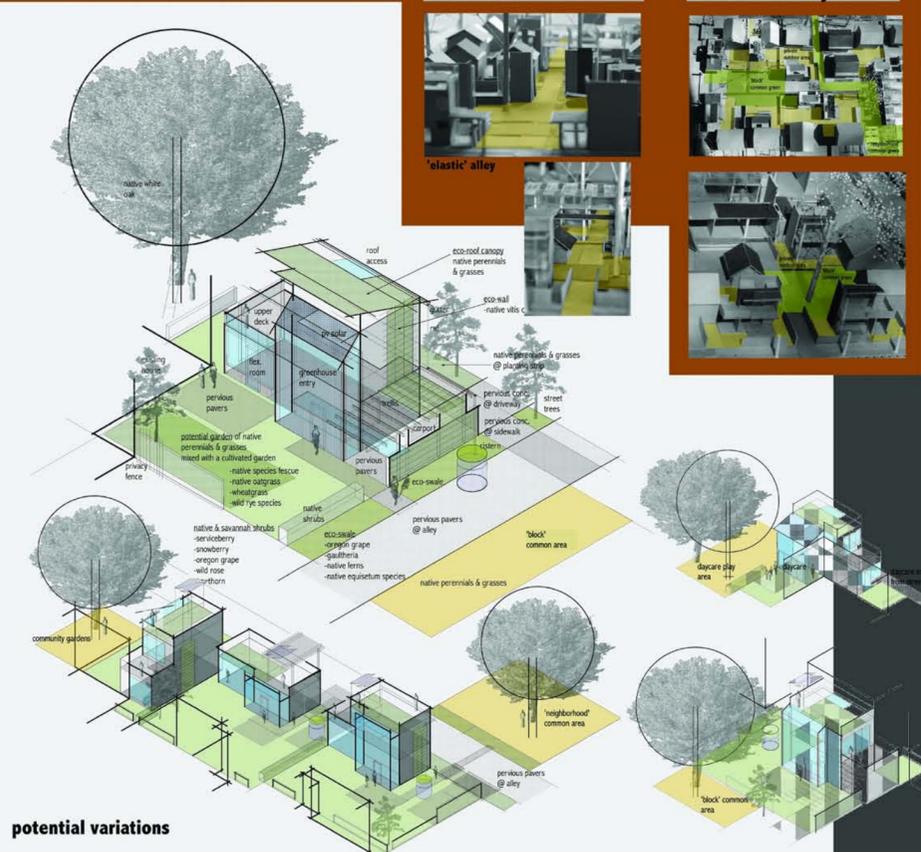
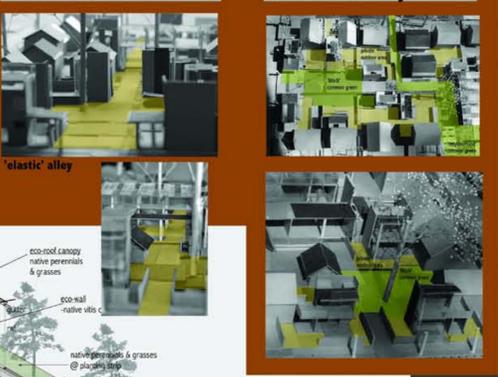
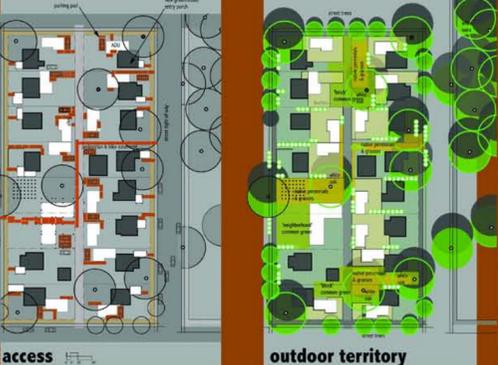


UNDERSTORY DWELLINGS

HABITAT **"open" building design:** the proposed garden dwellings and landscape design is characterized by 2' x 10' vertical gardens and solar collectors; each new dwelling is provided with access and privacy separation from the commonly shared outdoor spaces and existing homes; each allows flexibility (in a usable room and size dimensions, solar access from at least two directions for all interior rooms, and building movement along the edges).

TERRITORY **"interstitial" entry greenhouses:** each shallow depth dwelling (14' deep) is designed with a south and/or ventilating "greenhouse" solarium; entry vestibule and water garden; this interstitial space provides for an indoor/ outdoor visual and physical connection; and provides an indoor and outdoor water garden for the residents; in addition, the space moderates and diffuses light, allows for passive heating, and uses natural stack and cross ventilation for cooling and indoor air quality.

INHABITANTS **human and non-human "co-existence":** landscape design and building design at the canopy and understory provide non-human inhabitants - birds, mammals, amphibians, insects, with multiple and variegated "tracks" and "shelter" through the shared human neighborhoods.



Co-hosts, partners and sponsors



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Nature in Neighborhoods: Integrating Habitats Winners Series

Blend. Balance. Integrate.

Collaborate to redefine the built environment and restore nature.

More than 100 teams from around the world submitted entries to the Integrating Habitats design competition, proving that every space in which we live, work, shop and play can create places for both people and nature. These designs redefine current standards of environmental sustainability. The award winners illustrate new types of nature-friendly designs that balance development, human needs and the health of natural systems we all depend upon.



www.oregonmetro.gov/integratinghabitats

“This competition breaks new ground by asking how we can grow as an urban community while allowing the existing ecosystem networks on both private and public land to not only remain, but thrive.” —Josh Cerra, project advisor

Metro regional government

serves 1.4 million people who live in the 25 cities and three counties of the Portland metropolitan area. Metro's Nature in Neighborhoods initiative brings the regional government and local jurisdictions together to help ensure that the region's wildlife and people thrive in a healthy urban ecosystem.

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