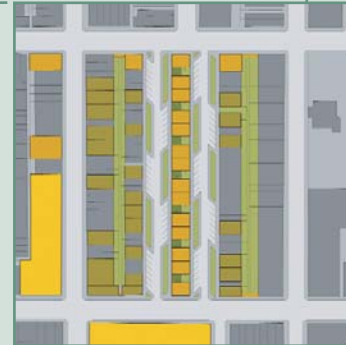
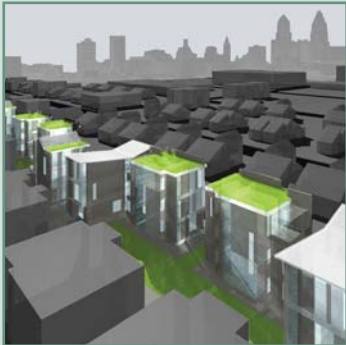


A DESIGN CHALLENGE:

AFFORDABLE INFILL HOUSING

AN INNOVATIVE, DESIGN-CENTERED APPROACH
TO REBUILDING PHILADELPHIA'S COMMUNITIES,
FEATURING THREE *PROTOTYPES FOR CHANGE*



◀ A Collaborative Design Project Sponsored by Philadelphia Neighborhood Development ▶
Collaborative together with the Community Design Collaborative of AIA Philadelphia



The Affordable Housing Design Challenge

In 2005, Philadelphia Neighborhood Development Collaborative (PNDC) and the Community Design Collaborative organized the Affordable Housing Design Challenge to address the site-specific challenges of small-scale row homes and blocks in three Philadelphia neighborhoods. Three community development corporations (CDCs) were matched with three leading design firms who volunteered their time and talents to undertake the Challenge objective to create the architecturally interesting and enduring affordable housing designs profiled in this report.



THE CONTEXT FOR DESIGNING CHANGE

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Philadelphia. It's been called the nation's next great city for good reason. It's a rare mix of big city living with a small town feel, and both historically and academically rich. In Center City and the neighborhoods that surround it, from Fairmount to Northern Liberties, homes sell quickly and developers are capitalizing on the city's popularity, driving a luxury condo boom that is filling in the city skyline.

But the health of Philadelphia and its quality of life can't be assessed by looking only at its center. Philadelphia is a city of neighborhoods, and its health is largely determined by the health of its closely connected communities.

While the character of many Philadelphia neighborhoods has been defined by their human scale, historic architecture and unique neighborhood identity—formed in an age when residents lived, worked, learned and played within community borders—these same qualities have been most vulnerable to the changing circumstances of the region and the lifestyles of its residents. The results of long-term population loss, relocation of job centers to the suburbs and weak housing markets are visible throughout the city's low- and moderate-income neighborhoods. Here high concentrations of small-scale row homes and residential blocks often show signs of deterioration and vacancy, conditions that threaten the long-term sustainability of communities.

At the forefront of recognizing the needs and responding to the market potential of these struggling communities are Philadelphia's community development corporations (CDCs). The three groups profiled in this report—Asociación de Puertorriqueños en Marcha (APM), New Kensington CDC (NKCDC) and Project H.O.M.E.—share a deep commitment to producing affordable housing¹ and rebuilding their neighborhoods to support a better quality of life and increased opportunities for residents. These CDCs are bringing about neighborhood change by developing affordable rental and homeownership units, implementing home repair and maintenance programs, treating vacant lots through greening and cleaning, and invigorating commercial corridors. Collectively, these CDCs have invested approximately \$107 million, producing 470 affordable housing units in recent years.

For these CDCs and others, quality design can be another essential tool for bringing about neighborhood recovery. Good design can make all the difference in addressing potentially obsolete housing and block configurations and in building affordable homes that can help strengthen families and neighborhoods.

A GREAT CITY IS MADE UP OF GREAT NEIGHBORHOODS. THE LONG-TERM STRENGTH OF PHILADELPHIA HINGES ON THE COLLECTIVE HEALTH OF THE MANY COMMUNITIES IT COMPRISES. EVERY NEIGHBORHOOD MATTERS.



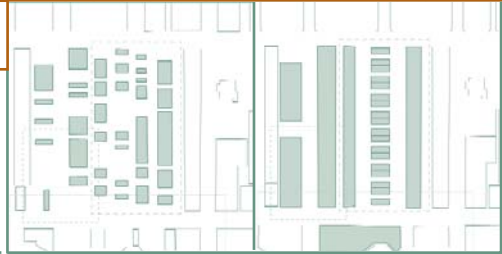
APM's Pradera Homeownership twins—an example of the significant investment and change CDCs are making in Philadelphia neighborhoods

¹ Affordable housing refers to units designated for low- and moderate-income people whose annual incomes are at or below 120% of the area median income of the metropolitan region (AMI). In 2004, a family of four at 50% of the AMI earned \$34,000 and a family of four at 120% of the AMI earned \$82,560.

THREE PHILADELPHIA NEIGHBORHOODS.

THREE VOLUNTEER TEAMS FROM LEADING PHILADELPHIA DESIGN FIRMS.

THREE INNOVATIVE APPROACHES TO NEIGHBORHOOD SUSTAINABILITY.

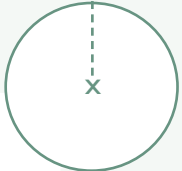


In their efforts to create homeownership opportunities that meet the needs of modern families, nonprofit and for-profit developers across the city are challenged by the limitations of the prototypical 600- to 800-square-foot row home. In a metropolitan region where families have come to expect three to four bedrooms, two bathrooms, green space and parking, are these homes obsolete or adaptable?

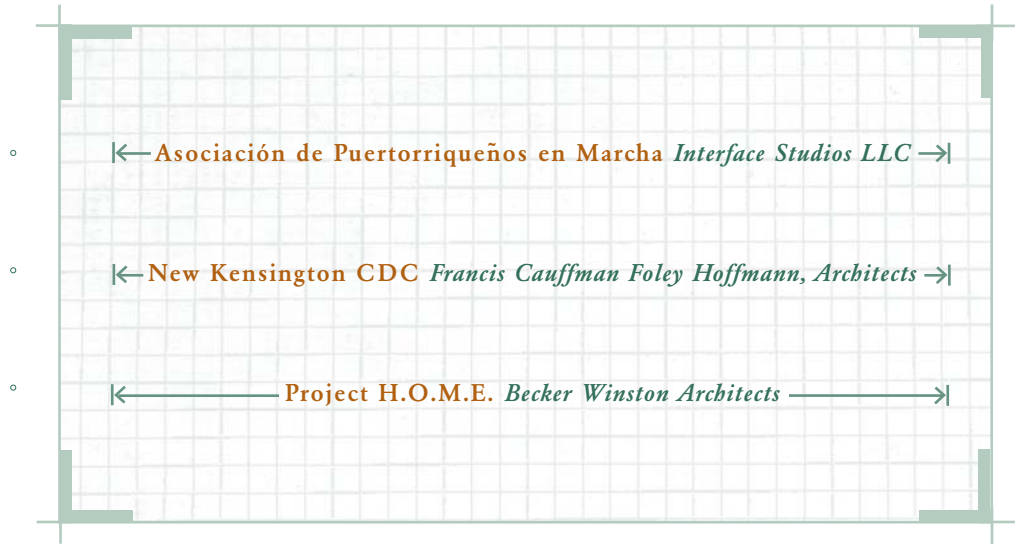
Philadelphia Neighborhood Development Collaborative (PNDC), an organization that provides funding and technical assistance to community development corporations (CDCs) to promote neighborhood revitalization, recognized this as a design issue with broad implications for the future viability of many Philadelphia neighborhoods. This led PNDC to approach the Community Design Collaborative, a volunteer organization that offers pro bono conceptual design assistance to nonprofit groups, and together the organizations created an Affordable Housing Design Challenge.

The project paired inventiveness and practicality by matching three CDCs with three leading design firms to tackle three site-specific, real-life neighborhood design challenges. The goal was to create innovative housing alternatives and expand the currently narrow menu of affordable housing options. APM, NKCDC and Project H.O.M.E. were natural partners for this project. All three were already assessing strategies to expand the impact of existing developments by creating additional homes on sites and blocks perceived as problematic or even obsolete.

This project linked PNDC's strong commitment to strengthening neighborhoods with the Community Design Collaborative's extensive professional network of best-in-class design professionals, who donated their services free of charge.



THE CHALLENGE TEAMS



INNOVATION AND COLLABORATION ARE ESSENTIAL COMPONENTS TO DESIGNING FEASIBLE SOLUTIONS AND SUPPORTING LONG-TERM NEIGHBORHOOD HEALTH.





CREATING ARCHITECTURALLY INTERESTING AND ENDURING DESIGNS FOR AFFORDABLE HOUSING can involve complex political, regulatory and financial hurdles. For this reason, teams were challenged to present ideas that would help advance the development process while introducing innovative, quality design solutions.

The three design teams were charged with creating prototypes for single-family, three-plus bedroom homes, ranging from approximately 1,200 to 1,600 square feet. The teams were also asked to consider how their designs would respond to open space creation and management, traffic congestion mitigation, preservation of the historical character and neighborhood context, and the cost and associated size constraints that come with subsidized development.

From concept through final review, the Community Design Collaborative played a pivotal role in managing this process, assembling the jury and supporting the design teams in successfully responding to the Challenge objectives. During a 3-month period, volunteer architects and planners from Becker Winston, Interface Studio, LLC and Francis Cauffman Foley Hoffmann contributed nearly 600 hours of their expertise. The teams pursued a collaborative process that was framed by the following elements:

- **Site visits.** The design firms conducted site visits to document existing conditions and familiarize themselves with the neighborhoods' history, challenges and opportunities. They also relied on their CDC contacts to gain insight into the real estate markets and the community preferences and priorities.
- **Preliminary products.** Each team was responsible for a set of products specific to its site challenge to illustrate conditions and proposed plans.
- **Mid-term review.** A mid-review session gave teams the opportunity to present preliminary design concepts to the jury and receive feedback and critiques.
- **Final jury.** After further refinement, teams presented their final designs to the jury in front of an audience of funders and community development and design practitioners.



← Jury reviews final team presentations →

Three factors below strongly influenced the design plans as they progressed from the mid-review to the final presentation.

- **Housing Market.** Identification of potential buyers, their functional needs and aesthetic interests was key to tailoring these design solutions.
- **Density.** Density reduction is customarily encouraged throughout low- and moderate-income neighborhoods as a means of downsizing housing infrastructure where the population no longer sustains it. The designers defined appropriate density levels for their sites, which also dictated treatment of open space and parking amenities.
- **Sustainability.** Designers sought to develop homes whose character and relationship to the street and environment could contribute to neighborhood stability for years to come. The Challenge also prioritized environmental sustainability, including re-use of existing structures where possible. One team explored the use of green technologies to build and operate energy-efficient homes.

NEW KENSINGTON COMMUNITY DEVELOPMENT CORPORATION

& FRANCIS CAUFFMAN FOLEY HOFFMANN, ARCHITECTS

Restoring the integrity of the 2000 block of Hazzard Street



'2 to 1' design perspective



'Replace the Space' design perspective



'Stack House'—the jury's preferred design

East Kensington was once a hub of textile manufacturing. It now, however, faces a decline in residences. Solving this problem is key to the neighborhood's transition to a healthy, more residential community. While the area has not experienced the real estate boom occurring in nearby Northern Liberties and Fishtown, recognition of the neighborhood's potential is growing. Such circumstances underscore NKCDC's commitment to attracting new investment and stabilizing property values while ensuring that there are affordable housing options for low- and moderate-income people.

NKCDC's strategies include a model vacant land management program that establishes stewardship for neglected lots. Using art as a catalyst, the CDC is re-energizing the Frankford Avenue commercial corridor. It recently adapted an historic factory building into the \$7.5 million Coral Arts House, which features 27 affordable, artist live-work spaces. Over the past five years, NKCDC has invested approximately \$10 million in rental, homeownership and mixed-use development, as well as an urban farm.

C O N T E X T F O R C H A N G E

Francis Cauffman Foley Hoffmann sought to maintain the integrity of the 2000 block of Hazzard Street while designing larger, family-friendly homes. This block is significant because of its proximity to the Coral Arts House, which has emerged as a new neighborhood anchor. Redevelopment of the six row homes would bring occupancy on the block close to 100%.

The design team developed three unique proposals for the redevelopment of six, two-story 800-square-foot row homes.

- The ‘2 to 1’ design combines each of the three pairs of adjacent 12-foot wide units into three substantially larger 1,400-square-foot homes. This approach has been successfully adopted in Philadelphia and Baltimore in similar contexts.
- ‘Replace the Space’ involves demolishing all six units to make way for four new 1,300-square-foot row homes on 18-foot-wide lots.
- The ‘Stack House’ preserves the existing six units, adding a third floor of living space and expanding to a total of 1,100-square-feet per unit.

The jury preferred the Stack House design because it integrates old and new elements into the existing block fabric and works well with the texture and context of the surrounding neighborhood. While throughout the city there has been an increased emphasis on density reduction, NKCDC believes that the Stack House will appeal to future homeowners, especially younger generations of local families who wish to raise their children in the neighborhood.



Design Elements:

REPAIR AND REINFORCE EXISTING STRUCTURE, REMOVE EXISTING BACK ADDITION; ADD THIRD FLOOR; OFFER APPROXIMATELY 1,100-SQUARE-FEET OF LIVING SPACE, FEATURING 3 BEDROOMS AND 2 BATHS FOR A TOTAL OF SIX NEW UNITS.

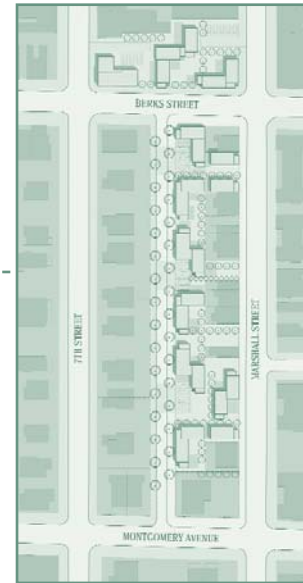
ASOCIACIÓN DE PUERTORRIQUEÑOS EN MARCHA (APM)

& INTERFACE STUDIO LLC

Green housing on Berks and Sheridan Streets



← Perspective on the future: looking North on Sheridan →



← Proposed site plan →

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Located between Temple University and the American Street Empowerment Zone, this eastern North Philadelphia area has a 50% vacancy rate that is most apparent on its small streets lined with two-story row homes. Directly contrasting this disinvestment are the 50 newly constructed, well-maintained Pradera owner-occupied homes, which were recently developed by APM and have transformed previously blighted blocks.

APM, a large Latino social service agency, now has 53 additional homes underway as part of the second phase of Pradera, furthering its strategy to provide choices for both existing and future residents. APM's \$65-million investment in this neighborhood also encompasses 210 affordable rental units and a 40,000-square-foot supermarket.

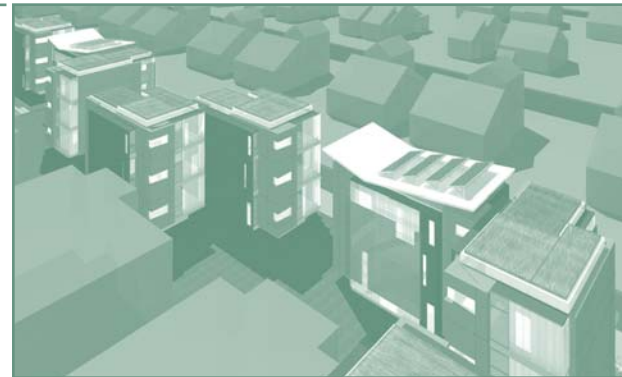


Interface Studio set out to design affordable housing that would contribute to the long-term environmental, economic and social health of the neighborhood. The two parcels of land are located along Berks Street, between 7th and Marshall Streets, next to Pradera II.

A key limitation of the site is that it is surrounded by rear lot frontages on both sides. The proposed solution is to use Berks Street as the “front door” to the site. It also incorporates vacant land between existing buildings as part of the new development and extends the landscape from the site out into the neighborhood.

The design features a simple housing box whose dimensions are comparable to those of an average Philadelphia row house (approximately 17' x 34'). Daylight and flexibility are emphasized along with the option of pre-fabricating the homes. The functionality of this project as a green development is driven by the proposed Homeowner’s Association (HOA). This would allow for the clustering of parking and green spaces for shared use and permit homes to be oriented in semi-detached, L-shaped configurations. It would also facilitate the implementation of green technologies to further economic and energy efficiencies.

Infill in many Philadelphia neighborhoods veers between adherence to the historical context and introduction of more traditionally suburban models. In this case, Interface Studio and APM anticipate that, given the area’s transitional environment, potential homeowners will be responsive to a modern, environmentally progressive design that manages to remain consistent with the neighborhood’s scale.



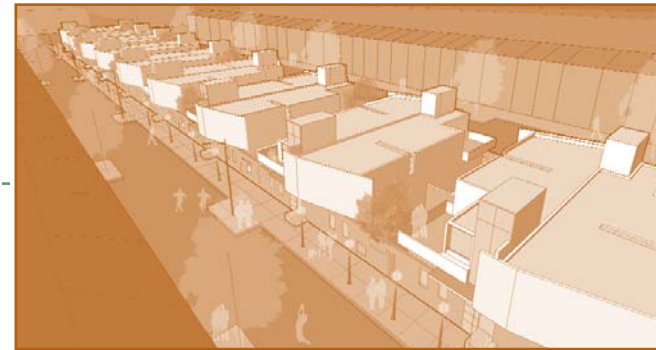
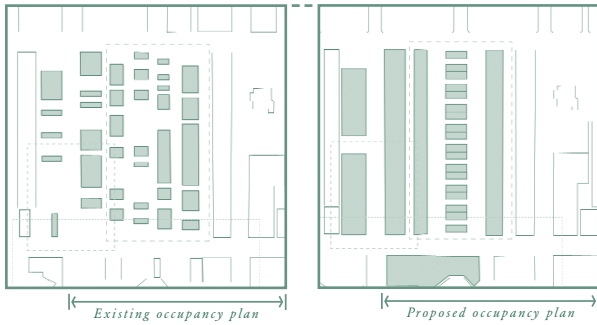
Design Elements:

A UNIT DESIGN AND SITE PLAN THAT PROVIDES A TRANSITION BETWEEN NEW TWIN HOME DEVELOPMENTS AND THE EXISTING NEIGHBORHOOD FABRIC.

PROJECT H.O.M.E.

& BECKER WINSTON ARCHITECTS

Block reorientation and reconfiguration



A new view for the St. Elizabeth's neighborhood

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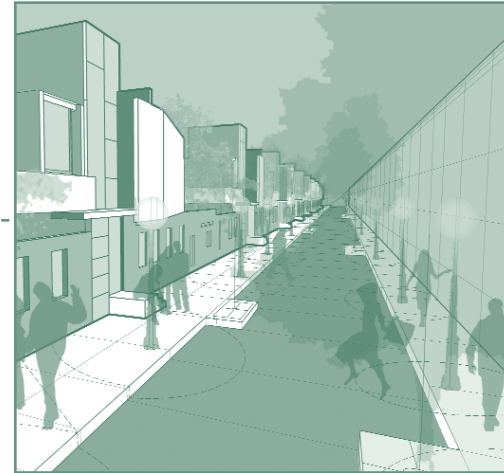
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s in much of North Philadelphia, it is a struggle to keep the social and physical fabric of the St. Elizabeth's neighborhood intact in the face of decades of population decline and disinvestment.

Since 1993, Project H.O.M.E. has supported the redevelopment of the St. Elizabeth's neighborhood through targeted initiatives totaling \$32 million. The investments provide a continuum of housing options (totaling 106 units), support the Ridge Avenue commercial corridor and treat vacant land. A significant achievement is the recent development of the Honickman Learning Center and Comcast Technology Labs, a 38,000-square-foot, state-of-the-art facility with programs for both children and adults that integrate technology with art, education and enterprise.

Project H.O.M.E. identified these three blocks, adjacent to 15 scattered site units slated for construction in 2006, as an important element of its strategy to re-establish occupancy, now close to 50%, in the St. Elizabeth's area. The challenge was to replace the existing 12-foot wide, two-story row houses and reconfigure the narrow blocks of Judson and Bucknell. The architects were also charged with incorporating security improvement strategies into their designs, reflecting the community's concerns about crime.

The proposed design calls for larger, more marketable twin homes that meet modern families' expectations for scale and amenities. The plan calls for partial removal of the existing streets to provide relief from the congestion of these narrow blocks and to accommodate more parking. The new homes would span from street to street providing frontage on each block to each unit. The layout of each house alternates so that each side of the twin faces the opposite direction, and the neighbors benefit from having "more eyes on the street." Private side yards are bounded by a punctuated masonry wall at the street. This continuous brick wall runs the entire length of the block providing privacy and a sense of security.



Design Elements:

WIDEN STREETSCAPES TO ACCOMMODATE PARKING NEEDS; ASSIGN OWNERSHIP OF ALL EXTERIOR SPACE THAT IS NOT PART OF THE STREET AND ELIMINATE UNSUPERVISED BACK ALLEYS; PROVIDE TREE ISLANDS AND ABUNDANT STREET LIGHTING AT THE CURB TO KEEP SIGHT LINES OPEN.

DESIGNS ON THE FUTURE OF AFFORDABLE HOUSING

When three leading, Philadelphia design firms accepted our challenge to explore affordable housing options, we couldn't have imagined the results would pack such promise. The *Affordable Housing Design Challenge* has truly been a collaborative effort, proving that advancing neighborhood revitalization is a shared commitment that requires innovation. The active engagement and leadership of the Community Design Collaborative has been invaluable. First and foremost, we owe Elizabeth Miller and Heidi Segall Levy tremendous thanks for playing a pivotal role in this inaugural venture. We are also indebted to the design firms, the jury and CDCs who contributed to the Challenge's success.

These are hardly designs for design's sake. Prototypes highlighted in this report expand the menu of design alternatives, creating housing typologies that fit the context of the urban neighborhoods while meeting the needs of both existing and future residents. Each project demonstrates that good design is fundamental to neighborhood sustainability and will serve as compelling prototypes that CDCs and others can use to secure financing. This collaborative challenge proved that affordable housing can meet contemporary needs, preserve the context of urban neighborhoods, and make use of the latest building technologies and efficiencies.

Our challenge here is hardly over. Advancing neighborhood revitalization in Philadelphia is a shared commitment requiring innovation. We need to keep stretching the concept of affordable housing, driving home the importance of good design and its ability to create choices, increase demand and sustain vitality. More sophisticated approaches to affordable housing should be encouraged, and an emphasis on what's cheapest and quickest should be replaced with a focus on long-term neighborhood impact. We look forward to raising these ideas as strategies for change and will continue to partner with the Community Design Collaborative to encourage broader recognition of the significant role design plays in supporting neighborhood revitalization.



Beverly Coleman *Program Director*

Philadelphia Neighborhood Development Collaborative

Philadelphia Neighborhood Development Collaborative is especially grateful for the contributions of the following organizations and individuals whose collective dedication to this project helped produce the innovative prototypes highlighted in this report. The designs were strengthened significantly through their leadership, vision and support.

CO-SPONSOR

The Community Design Collaborative of AIA Philadelphia

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New Kensington Community Development Corporation
& Francis Cauffman Foley Hoffmann, Architects

Asociación de Puertorriqueños en Marcha
& Interface Studio LLC

Project H.O.M.E.
& Becker Winston Architects

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The opinions expressed in this report are those of the author and do not necessarily express the views of the funders.
