1. NAME OF PROPERTY

Historic Name: Chatham Village

Other Name/Site Number: N/A

2. LOCATION

Street & Number: Bounded by Virginia Ave., Bigham St., Woodruff St., Saw Mill Run Blvd., and Olympia Rd. Not for publication: N/A

City/Town: Pittsburgh Vicinity: N/A

State: PA County: Allegheny Code: 003 Zip Code: 15211

3. CLASSIFICATION

Ownership of Property		Category of Property	
Private:	X	Building(s):	
Public-Local:		District:	X
Public-State:		Site:	
Public-Federal:		Structure:	
		Object:	

Number of Resources within Property

Contributing	Noncontributing	
209		Buildings
1		Sites
1		Structures
		Objects
211	0	Total

Number of Contributing Resources Previously Listed in the National Register: 53

Name of Related Multiple Property Listing: N/A

4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ____ nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ____ meets ____ does not meet the National Register Criteria.

_____

Signature of Certifying Official Date

_____

State or Federal Agency and Bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria.

_____

Signature of Certifying Official Date

_____

State or Federal Agency and Bureau

5. NATIONAL PARK SERVICE CERTIFICATION

I hereby certify that this property is:

___ Entered in the National Register _____
___ Determined eligible for the National Register _____
___ Determined not eligible for the National Register _____
___ Removed from the National Register _____
___ Other (explain): _____

_____ _____

Signature of Keeper Date of Action

6. FUNCTION OR USE

Historic: Domestic Sub: Multiple Dwelling

Current: Domestic Sub: Multiple Dwelling

7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: Late 19th and Early 20th Century Revivals
Georgian Revival

MATERIALS:
Foundation: Brick
Walls: Brick
Roof: Slate
Other: Metal

Comment: SECTION BREAK. DO NOT DELETE.

Describe Present and Historic Physical Appearance.

The following description was taken from the 1996 National Register nomination for Chatham Village.[1] The appearance of the community has not changed since that date. A change in the contributing building count for this nomination to 209 buildings is due to the NHL requirement that rowhouses be counted as individual buildings. Chatham Village consists of 197 rowhouse units in 40 attached groups. Additionally, the tennis courts are counted as a contributing structure in this nomination. The landscaped site plan with grounds, courtyards and the Chatham Woods greenbelt is counted as one contributing site.

"Chatham Village is a planned garden community located in the Mt. Washington neighborhood less than two miles southwest of downtown Pittsburgh. The forty-six acre historic district contains fifty-two [209] contributing buildings and a contributing site [plus one contributing structure, the tennis courts]. There are no noncontributing buildings. The contributing buildings include the former Thomas Bigham house built in 1849 which was renovated in 1936 and 1992 into a community clubhouse called Chatham Hall; twenty-six buildings of rowhouses, one store building, two tool sheds, two garage compounds, and one garage compound with attached tool shed, all built in 1932; one store building built in 1933; fourteen buildings of rowhouses, one tool shed, and one garage compound with attached tool shed, all built in 1936; one apartment building called Chatham Manor and one garage compound with attached tool shed, all built in 1956. The hilly site was planned to locate attached rowhouses facing onto landscaped garden courts. Curvilinear roads were placed along the perimeter of developed areas and separated them from the surrounding woodland called Chatham Wood to the south and east, and Pittsburgh's Olympia Park below a steep grade to the west. Within the historic district as uncounted resources are hiking trails, tennis and basketball courts, ball fields, sandboxes, picnic areas, a playground, and Chatham Wood. The site has exceptional integrity, the buildings and grounds in the historic district are well preserved and have very closely retained their original appearance by the strict design review process of the community association[2] and by a long-standing policy of common maintenance of buildings and grounds.[3]

"Although Chatham Village was constructed in three phases, the general design concepts for the buildings and the landscaping were repeated in each phase to give a visual unity to the entire development. A consistent building setback line was used along streets, and matching street trees and hedges were planted to unify the development. Since 1932 the buildings were constructed of similar materials in the Georgian Revival style with some French Eclectic style touches.[4] Building clusters repeat similar massing and roof lines, but randomly alternate hipped and gable roof forms for variety. A consistent vocabulary of architectural details including double-hung-sash windows, French doors, wrought-iron porches, cast-stone ornamental coat-of -arms, light fixtures, decorative brickwork, slate roofs, and other details give the development a distinctly unified campus feel. The architecture of Chatham Village is distinguished in its subtle

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[1] David Vater, "Chatham Village Historic District," National Register documentation, 1996, Section 7, pp. 1-4.

[2] Chatham Village Homes, Inc. Rules and Regulations.1960 - 1990 and Guidelines for Renovations. September, 1990.

[3] Chatham Village Homes, Inc. By-Laws. 1960 - 1986.

[4] Kidney, Walter C. Landmark Architecture, Pittsburgh and Allegheny County. 1985. p. 204. The style of Chatham Village is Georgian Revival. The French Eclectic style touches occur in the roof shapes of the store and tool shed buildings, and the plank doors of the tool sheds.

use of symmetry. Several imaginary axis run though the layout, sometimes centered on sidewalks and steps, resulting in opposite houses being set like bookend twins. The terracing of the hilly site adds variety to the building groups while the extensive landscaping, large garden courts, continuous hedgerows, common greens, and surrounding greenbelt buffer contribute to the pervasive Garden City identity which distinguishes this development from the adjoining neighborhood streets.

"The community context of the Mt. Washington area is that of a district of residential streets which were built and settled in the late 19th century. The houses are typically single family homes, tightly aligned along a grid of hilly streets, with minimal side or front yards. The homes were generally constructed one at a time by each single owner and their builder. There is a variety of styles and exterior materials include wood siding, aluminum siding, brick, insul-brick, and stone. Chatham Village presents a significant contrast to the existing neighborhoods which surround it, and is visually distinguished from adjoining properties as it is set apart on its own hillside ridge. At Chatham Village the roads were not layed [sic] out in a grid, but run in a curvilinear fashion which follows the contours of the hillsides. Roads were planned to loop onto themselves offering no shortcut to through traffic. Speedbumps are used to further slowdown local traffic. The orientation of the houses is faced toward the landscaped parks at the center of each cluster of buildings. Front doors open to the garden court side, rather than to the road. Living rooms view the green not the street. Kitchens and the service side of the houses face the streets.

"The one hundred ninety-seven townhouses include two, three, and four bedroom units that are attached as rowhouses in groups of two to eight units. There are ninety-one two-bedroom units, ninety-nine three-bedroom units, and seven four-bedroom units. Units of similar sizes are not grouped into an area, but are mixed among the buildings, however the four bedroom units occur only in the 1936 portion of the site south of Bigham Road. The building heights range from two to three and a half stories above street side. Homes ordinarily contain a full basement, a first floor with living room, dining room, kitchen, and a second floor with two or three bedrooms, bath, and linen closet. A few homes have a third floor and contain four bedrooms and two baths. All dwellings have basements, in some units a part of the basement is used as a recreation room, in others for a garage.

"The rowhouses were designed in the Georgian Revival style. They are not reconstructions of period homes, but are generally a 1930's simplified interpretation of the Georgian style. Homes are constructed of a red-range brick [over wood frame] that is detailed with brick dentils at cornices and chimney caps, and rowlock window sills. The slate roofs are steeply pitched gables and hips of various heights and slopes. Gutters, flashings and downspouts are weathered copper. Exterior doors are multi-lite glazed wood doors, and are all painted dark green. Windows are all multi-lite wood sash and are all painted ivory. Most are six-over-six double hung, supplemented by fixed lites and casements. Different window groupings lend interest to the restrained, Georgian Revival style facades. Other important details are small wood balconies accessed by French doors on the street side of most houses, and the flat-roofed porches of various sizes provided at the entry doors of some units. Green-painted ornamental iron work is used for railings and porch supports which have a cris-cross pattern with small elliptical bosses at their intersection. Other entries have limestone entablatures surrounding the doorway. Integral garages are recessed into the facade by an alcove that also contains a basement entry door. All homes are separated by soundproof concrete block walls from basement to roof.

"The cast stone coats of arms used as ornaments recall Pittsburgh's history.[5] Chatham

[5] Starrett, C.V. "Colorful History of Pittsburgh Symbolized in Village Names" Chatham Village News. October 10, 1982. p.4.

Village was named in honor of William Pitt (1708 - 1778), the Earl of Chatham, who served as the British Secretary for Colonial Affairs in 1757, and for whom the City of Pittsburgh is named. Other ornamental crests represent George Washington (1732 - 1799) and the family of the Marquis Duquesne (1700? - 1778). The Colonial period also provided the street names as the Penn family is recalled in Pennridge Road and the Washington family's ancestorial [sic] home Sulgrave Manor is recalled in Sulgrave Road.[6]

"Where the slope permits seventy-six integral garages were located in the basements of housing units. These are accessed by short driveways or in private cul de sacs. An additional one hundred thirty-two garages are grouped together into compounds. The garage compounds have flat roofs, exterior brick walls, and dark green painted wood paneled sectional overhead doors. Garage compounds have only one driveway entrance to serve as many as twenty-four garages that share maneuvering space. The garage compounds were designed with some Georgian Revival style details including brick buttresses, arched doorways, stone caps, and wrought iron lanterns.

"Among the buildings in Chatham Village are six tiny but imaginative gardener's tool sheds. Their design concept follows a long tradition of creating these picturesque and sometimes elaborate garden folly structures. The six tool sheds are all built of brick with slate roofs to be in harmony with the surrounding homes, each are of different shape and have individual distinguishing characteristics. The tool sheds are Georgian Revival style and some have French Eclectic style features. One is a tall tower with hipped roof, one an octagon with hipped roof, one is cylindrical shaped with conical roof, one has an open gazebo with hipped roof, one is rectangular with a steeply gabled roof, and one is a cube with a tall pyramidal roof. Most have decorative copper or wooden rooftop finials. Some have hand-adzed solid oak lintels above the doors. All but one have heavy V-grooved plank doors and most have wrought iron thumb latches. One has ornamental wrought iron strap hinges.[7]

"The exterior appearance of the buildings remains essentially the same as when they were built. Since its inception, a policy of common exterior maintenance has resulted in consistent repair to all of the buildings in the community. Exterior alterations by residents have never been permitted. Storm windows have been added to protect the original wooden windows. Improved electrical service, underground cable TV and other improvements have been undertaken to provide contemporary amenities without diminishing the historic character. Multiple interior improvements, principally to kitchens, bathrooms, and a few flagstone patio areas, have been undertaken by residents after review and approval by the cooperative.

"The social center for Chatham Village is a clubhouse facility now known as Chatham Hall which was originally the Thomas Bigham house. It can be described as a Greek Revival style residence of 1849. Facing southwest is a two-story element that contains the original living spaces of the Bigham family. The leg of the "T", extending to the southeast is an ell comprised of two stories plus an attic, and originally contained servants' rooms and kitchen. As a functioning homestead, various outbuildings had stood nearby to support the household. These included a corn crib, carriage house, barn and privy.[8] None of the outbuildings remain.

"The south elevation of the building which today faces the picnic grounds was the original front of the house. The exterior walls are smooth red brick. The brickwork is laid up to be tied back by header bricks at every seventh course. The front facade is symmetrical and is

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[6] Perkins, Mary Mendenhall. "A June Day at Sulgrave Manor." Art and Archaeology. March, 1923. Vol. 15, No. 3, p. 139-143.

[7] Vater, David. "Our Delightful Follies" Chatham Village Times. November, 1994. p. 6-7.

[8] Stout, Melville Bigham. "Family Notes" May, 1977. Manuscript among family papers of Mrs. Mary Gibson of Upper St. Clair, PA.

divided into three bays by two offsets which run from grade to roof. The brickwork of the center section rises up and is capped by a low sloping pediment characteristic of the Greek Revival style. The remainder of the roof is hipped and has twin chimneys. There is a gable roof on the ell extending to the rear of the building. As originally built the house had a prominent lower roofed portico which aligned to the center portion of the facade. The portico had four square wooden columns and two pilasters all with squared capitals and bases. This supported a very deep architrave surmounted by a railing of classical turned wooden balusters.[9] The original portico was later replaced with a wider wood porch with four wood columns. The second porch was removed in 1938 and was replaced by a wrought iron porch, and a metal fire escape was added in 1950. Although the house has been renovated on several occasions, most of the interior of the 'family' wing remains unaltered, including the principal staircase, standing and running trim, window and door casings, ornamental plasterwork ceilings, and several marble mantelpieces. The exterior of the house is original with the exception of the porches and a few doors and windows in the ell. In 1935 the cellar was excavated into a full basement. A new heating system, toilet rooms, and hardwood floors were added. A five-bay, two-story wooden porch with metal fire stair was added on the southeast face as part of 1992 renovations which included an updated kitchen and accessible powder room. The plan has a center hall on the first and second floor. The first floor has a kitchen, dining room, ballroom, and parlor; the second floor has four meeting rooms that were formerly bedrooms.

"A description of the commercial area of Chatham Village concerns [includes] two one-story store buildings for seven tenants at the north west and south west corners of the intersection of Bigham Street and Virginia Avenue. The store buildings were constructed in the Georgian Revival style with some French Eclectic style touches, and are in a scale compatible with the neighboring homes and use the same materials of red brick and slate roofs. The larger building, at the southwest street corner, has two massive chimneys which give the building a picturesque effect, and a well concealed flat roofed portion at the rear. The tall hipped slate roofs have metal finials at each peak. Windows and doors are generally similar to the housing groups, however larger glass angled display windows originally faced Bigham Street at recessed shop entrances. The center portion of the larger building was altered in 1950 to accommodate a continuous glass storefront for the Union Supply Company. The glazed storefront was removed in the 1980's and replaced with wood siding and residential scale windows. Some large window openings were also bricked-in. The store fronts of the commercial buildings bear the most alteration in appearance of any part of the buildings in Chatham Village, but enough of the original appearance is evident to easily distinguish the few altered portions.

"The three story, nineteen unit Chatham Manor apartment building sits on the high point of the site at the southeast corner of the intersection of Virginia Avenue and Bigham Street immediately opposite the commercial buildings. It is also a simplified Georgian Revival style building of red brick and has a stone trimmed entrance, flat roof, and wooden double hung windows similar to those in the townhouses. Each floor has apartment units off a central corridor and there is elevator service. There are three apartment types. Each has a large living/dining room, kitchen, bath, one bedroom, and sliding double door closet space. The building also contains a laundry room, and additional storage areas in the basement.

"The landscape development of Chatham Village can best be described by recognizing that the buildings and the landforms were set to interlock into a comprehensive environment of terraces. The buildings engage the terrain in a succession of low walls. The site plan separates the automobile from pedestrians by lowering the roadways to basement level and by locating

[9] The description of the former porch was derived from three old photographs among family papers of Mrs. Mary Gibson of Upper St. Clair, PA.

roads at the outer perimeter of the housing groups. The inner landscaped courts are exclusively pedestrian spaces. Chatham Village's original total landscape development for the housing area included ten acres of lawns, three miles of hedges, nearly four thousand shrubs, over five thousand square yards of ground cover, and nearly five hundred trees. In addition to this there is a natural greenbelt area. The recreation areas include a large open sloping lawn, three tennis courts, a mushball field, volleyball field, basketball court, and a children's playground with play equipment. There is also a designated area for members' vegetable gardens.

"As a living garden minor changes have inevitably occurred. Some elms were killed by Dutch elm disease, and several large oaks fell in wind storms. Driveway hedges on the service side of Pennridge and Olympia were removed. In 1936 a new pedestrian scale lighting system was installed in the first phase garden courtyards and cast-iron boulevard poles which were relocated to street areas. The flag pole was added in 1945. The rose garden dates from 1952. Playground equipment and the drinking fountain are newer replacements. Some additional offstreet parking was added on the east side of Sulgrave Road. In 1986 a replanting of site trees was executed using the original blueprints as a guide, under the direction of GWSM, the successor firm of the original landscape architects. Exterior courtyard lighting was replaced in 1991 with nearly matching custom fixtures.

"Chatham Village's greenbelt has been named 'Chatham Wood' and it is a part of the historic district. Chatham Wood comprises twenty-five acres which is more than half the total land area of the planned community. These steep, wooded hillsides are virgin woodland which have never been cleared since colonial settlement, and have been kept undeveloped to this day. Chatham Wood contains a number of towering oak trees estimated to exceed two hundred years in age, and provides an important recreational resource for the residents of Chatham Village and a preserved habitat for native plants, animals, and birds unique in its close proximity to downtown Pittsburgh. Chatham Wood is interlaced with two miles of graded trails and contains a picnic grove, cliff faced ravine, waterfall, two streams, three wooden footbridges, and a water garden. The greenbelt also serves to buffer the community and to preserve views from the residential area.

"In 1936 under the direction of landscape architect Theodore Kohankie, over two thousand trees and shrubs were planted to supplement the native growth in Chatham Wood. Of the forty varieties of trees selected, practically all of them were native to the western Pennsylvania hillsides. The few alterations to Chatham Wood include the following: in 1936 the woods areas were protected by the installation of a perimeter chain link fence; in 1938 a double fireplace of rough faced random shaped stone with two metal grates and a tall stone chimney was constructed in the picnic grove; the wooden footbridges have been replaced on occasion, most recently in 1994."[10]

Integrity

Chatham Village retains an extraordinary degree of integrity to its historic location, desigu, materials, workmanship, feeling, association and setting. The community remains intact and in use as intended by the desiguers, and continues under the single ownership of a resident's cooperative, Chatham Village Homes, Inc. The protective greenbelt and superblocks continue to define the historic community boundary. Of particular importance, the superblocks and interior parks still operate as desigued, removing pedestrian traffic from the vehicular traffic on the periphery. The substantially built brick rowhouses with slate roofs show exceptional integrity to

[10] David Vater, "Chatham Village Historic District," National Register documentation, 1996, Section 7, pp. 1-4.

their original construction. Restrictions governing outward changes to the buildings have maintained complete integrity to the original appearance of the Chatham Village dwellings. The landscape design remains intact to an unusual degree as well. Many of the original plantings of deciduous trees, hedges, shrubs and groundcover continue to thrive under the constant care of the full-time grounds crew. Standing in the interior greens of Chatham Village, the integrity of feeling and association to the original intent of the designers is unmistakable. The sense of an American village prevails, and the community continues to operate as a neighborhood entity.

The far-sightedness of the Buhl Foundation in designating a large amount of the hillside site as a greenbelt has preserved the peaceful setting of Chatham Village despite intense development of the Mt. Washington section of Pittsburgh. Much of the land adjoining Chatham Village on the north and east had been previously subdivided and developed c.1900; many of these houses, seen in photos taken during the construction of Chatham Village, are still standing today. Viewed from the air, these houses contrast markedly with the grouped hillside homes around interior greens, illustrating the difference between traditional profit-motivated urban planning tied to frontage along the gridiron street plan and the innovative social-minded plan of Chatham Village.

Comment: SECTION BREAK. DO NOT DELETE.

8. STATEMENT OF SIGNIFICANCE

Certifying official has considered the significance of this property in relation to other properties:
Nationally: X Statewide: ____ Locally: ____

Applicable National Register Criteria: A X B ____ C X D ____

Criteria Considerations (Exceptions): A ____ B ____ C ____ D ____ E ____ F ____ G ____

NHL Criteria: Criteria 1 and 4

NHL Criteria Exclusions: N/A

NHL Theme(s): I. Peopling Places; III. Expressing Cultural Values

Area(s) of Significance: Architecture; Community Planning and Development; Landscape Architecture

Period(s) of Significance: c. 1929 – 1956

Significant Dates: 1932
1936
1956

Significant Person(s): N/A

Cultural Affiliation: N/A

Architect/Builder: Phase 1 (1932): Stein, Clarence S., Wright, Henry- Planners; Ingham, Charles T., Boyd, William T.- Architects; Griswold, Ralph E.- Landscape Architect
Phase 2 (1936): Wright, Henry- Planner; Ingham, Charles T., Boyd, William T.- Architects; Kohankie, Theodore M.- Landscape Architect
Phase 3 (1956): Bigger, Frederick- Planner; Ingham, Boyd & Pratt- Architect; Griswold, Winters & Swain- Landscape Architect

NHL Comparative Categories: N/A

Comment: SECTION BREAK. DO NOT DELETE.

State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.

The community of Chatham Village, planned and built between 1929 and 1956, is significant under National Historic Landmark Criterion 1 (Events) for its impact on the development of regional and urban community planning in the United States, both in private and government funded construction associated with post-Depression housing and post-WWII development. Chatham Village's distinctive design was based on the ideals of the Garden City movement, including single ownership and the protective greenbelt of undeveloped land, but drew heavily on elements of the "Radburn Idea," particularly the use of superblocks with interior parks, and the complete separation of automobile and pedestrian. Henry Wright and his partner Clarence Stein had successfully demonstrated at Radburn (1928) the safe juxtaposition of housing and the automobile through the use of superblocks, interior greens, the hierarchy of road use, and pedestrian pathways. However, Chatham Village gains significance on a national scale through the Buhl Foundation's departure from the Radburn plan in its commitment to providing a safe and attractive community setting for moderate income working families, by constructing housing at a higher density and retaining single ownership of the entire community. The cost-savings were realized through the use of the superblock design with its reduced infrastructure investment, and high-density attached dwellings to lower construction costs. The successful use of attached grouped dwellings in a garden environment, demonstrated at Chatham Village, influenced the growth of the garden apartment-style subdivision in American urban and suburban planning.

The Chatham Village community is significant under National Historic Landmark Criterion 4 (Architectural Distinction) as a district that is distinctive and exceptional in its design, representative of a remarkable period of innovative planning which continues to have national significance. Designed as a high-density community for moderate-income workers, the houses were constructed in attached groups, based on the exhaustive cost-analysis studies of planner Henry Wright. With an eye to a long-term ownership commitment, the Buhl Foundation had the buildings constructed of brick and slate to ensure their durability. These construction materials added to the modest elegance of the Georgian Revival architecture of the house groups. Built during a time of rapid technological change, the 'reverse-front' orientation of house groups, facing the open courtyards in the superblocks' center, evoked the comfort of the traditional English village. The meticulously designed and maintained landscaping of the terraced greens and courtyards dramatically enhanced the village atmosphere and provided the healthy environment thought to be necessary for modern living. Henry Wright's innovative 'reverse-front' design of the houses, in which service rooms face the street and living rooms face the interior park, turned the focus of the community inward, away from the noise and activity of surrounding development. The distinctive planning and design elements used at Chatham Village produced the remarkable combination of an ideal suburban development affordable for moderate-income residents.

The national significance of the Chatham Village community emerges through the following NHL thematic frameworks: Peopling Places (community and neighborhood), and Expressing Cultural Values (the automobile, architecture, landscape architecture, and subdivision design).

National Historic Landmark Themes Identified

Peopling Places: Community and Neighborhood

The planned community of Chatham Village was conceived as a philanthropic project by the Buhl Foundation of Pittsburgh, to provide high-quality housing for moderate-income working families; a response to the growing national problem of insufficient low and middle-income housing supplies and the unplanned growth of cities. Planners Clarence Stein and Henry Wright, who had demonstrated their cost-saving innovative community designs at Sunnyside Gardens (1924) and Radburn, N.J. (1928), based on the planning and community theories of the Regional Planning Association of America, fit well with the philanthropic intentions of the Foundation. Although housing reforms associated with the Progressive Movement had effectively improved basic housing needs through building codes and zoning, the additional construction costs associated with these improvements made low-income housing unprofitable for the commercial building industry. Through the same period, a growing middle class sought escape from the deepening squalor associated with the slums and industrial concentrations of the cities. The speculative real estate market was rapidly developing the edges of already over-crowded cities with monotonous grid-iron rows of tightly packed houses, an equally unappealing solution for housing low to mid-level working class families.

The plan for Chatham Village combined many of the physical elements and community-building theory associated with the Garden City movement of England. Additionally, the community was planned to provide a continuous source of income for the Foundation through rental returns, resulting in the Foundation's commitment to quality construction and continuous maintenance. Improved with cost-saving features demonstrated at Sunnyside Gardens and Radburn, particularly the superblock with interior green and attached group housing, Chatham Village achieved a healthy and desirable community environment for moderate-income working families.

The Great Depression of the 1930s proved the financial soundness of Buhl Foundation's single ownership of the whole community and the initial investment in quality construction and environment. While Sunnyside and Radburn faltered financially, Chatham Village continued to produce a return on the Foundation's investment. Low-income displaced families benefited from federal government "greenbelt" towns modeled on the designs of Stein and Wright, including features specific to Chatham Village such as single ownership and attached group housing. In the late 1930s, the Federal Housing Administration eagerly adopted the garden apartment template of Chatham Village as a desirable solution for large-scale rental housing. It was eventually adopted as well by public housing authorities, however with a dramatic loss of the original intent, which proved to be a failure.

Expressing Cultural Values: The Automobile, Architecture, Landscape Architecture and Subdivision Design

The Chatham Village plan was designed to respond to the needs and values of the growing middle class of the 1920s in the United States. Rising construction costs following World War I accelerated the already deepening crises of affordable housing stock. Speculative subdivisions, aimed at producing the most profit on the least amount of land, were increasingly monotonous. The tightly packed houses provided only the minimum of amenities considered necessary for quality of life, sunlight, fresh air, open space, and accommodation for, and safety

from, the automobile.

Like its immediate predecessor Radburn, known as the "Town for the Motor Age," Chatham Village was designed specifically with the automobile in mind. Its design maintained a separation of the automobile from the pedestrian through the use of interior courts with pedestrian paths and single-use roads around the periphery of the superblocks. The curvilinear roadways, following the topography of the hillside, were designed to slow the driver down. The central courtyards and paths provided play spaces free of traffic, and provided pedestrian access to neighbors, garage compounds, and the commercial area. Additionally, the landscaped greens were designed to provide sunlight and fresh air for the surrounding houses.

The architecture of the Chatham Village house groups was also designed to appeal to middle class values. The attached groups of rowhouses were key to the affordability of the new community, but also served to define and enhance the enclosed interior courts. The Georgian Revival architectural style was not elaborate but was sufficiently elegant to imply some level of status. Equally important, the house groups were set into the hillside on a series of terraces, creating exceptional visual interest and avoiding the monotony more typically associated with the rowhouse genre. The "reverse-front" design of the Chatham Village dwellings, a complete reversal of the typical street-front rowhouses lining the streets of America's cities, turned the front of the house toward the quiet interior park and away from the street-side hustle, dirt and danger of traffic. The service (kitchen) side, or rear of the house, many with incorporated garage, then faced toward the street.

Chatham Village successfully included all of those elements considered necessary by the emerging middle class – the open space with light and air, safety, automobile accommodation, and modern conveniences. Most importantly, Chatham Village was successful in including these while maintaining costs at a level affordable for the working families yearning to escape the city. Through exhaustive cost-analysis of large-scale construction including land purchasing, building design, construction cost, and infrastructure placement, the designers Clarence Stein and Henry Wright were able to realize construction savings. These savings allowed incorporation of the desired amenities without the necessity of raising prices.

The Chatham Village "garden court" design continues to represent an expression of the American cultural value placed on open space and gracious living for middle class families. Through the adoption of design elements of Chatham Village, the Federal Housing Administration's Large Scale Housing Division influenced the standards for "garden apartment" complexes, a continuing source of affordable, high-density housing with at least some associated open space, occupied by generations of low and middle class Americans.

Historic Context

The historic significance of the Chatham Village community is couched in the growth of American cities, the expansion of the middle class, and the evolution of suburban development beginning in the late 19th century and continuing through the first half of the 20th century. Although the housing needs for upper class families in the suburbs had long been met through the "progressive" designs of men such as Frederick Law Olmsted, Sr. and Calvert Vaux, and Alexander Jackson Downing, among others, a housing crises for low to middle income families came to a head following WWI. Rising construction costs after the war made affordable housing unprofitable for the established residential building industry.[11] However, experiments with

[11] Roy Lubove, Community Planning in the 1920's: The Contribution of the Regional Planning Association of America, (Pittsburgh, PA: University of Pittsburgh Press, 1963), pp. 17-18; this book is a detailed

community building by federal government agencies during the war, as well as the successful "New Towns" and "Garden Cities" developed in Europe and Great Britain, laid the groundwork for solutions to the post-war housing crises. A generation of architects, landscape architects, city planners, and engineers were influenced by the designs of Olmsted and Vaux, the community vision of Ebenezer Howard's Garden Cities, and the evolving planning theories of the early 20th century. The resulting work of these men and women, represented in the planned communities of Sunnyside, Radburn, Chatham Village, the greenbelt towns, and Baldwin Hills Village, influenced city planning and suburban design in the United States and the world throughout the 20th century.

In the United States, the migration of the upper class to designed subdivisions beyond city limits began in the second half of the 19th century. Specifically designed for wealthy families, these early developments often employed the curvilinear street pattern, community parks, and building restrictions found in many modern subdivisions.[12] Significant projects from this period include Olmsted and Vaux's Riverside, Illinois (1869) and Llewellyn Haskell's Llewellyn Park, New Jersey (1857).

Throughout the late 19th century, as suburban design for the wealthy focused on large lots and healthy surroundings, working class housing suffered the degradations of the speculative market. In the United States, government action to ensure "healthy" housing for the poor was limited to restrictive building codes that tended to increase building costs. While these measures improved building construction they did little to improve the environment in which low and middle-income families lived.[13]

In Europe and Great Britain a more active government approach to meeting low-income housing needs was developing, described as "constructive" rather than "restrictive" legislation, "including public housing, municipal land purchase, low-interest loans to individuals and limited-dividend companies, and tax exemptions..."[14] Planners were influenced by the writings of Camillo Sitte of Austria (1889) and Ebenezer Howard in Great Britain (1898). Howard's social reform plan, laid out in his treatise, To-morrow: A Peaceful Path to Real Reform (republished in 1902 as Garden Cities of Tomorrow), envisioned the establishment of planned satellite cities surrounded by an agricultural greenbelt, known as Garden Cities, which would be community-owned (non-speculative), provide employment for a diverse population, and be limited in size. Such cities would create a "new" (traditional) sense of community through planning. Construction of several new towns based on Howard's community-building theory began quickly, although privately funded. Designed by Raymond Unwin and Barry Parker, the English Garden Cities of Letchworth (1902), Hampstead Gardens (1905), and Welwyn (1919) had a lasting impact on city planning both in Great Britain and the United States. In addition to the use of Howard's concept of a self-contained satellite town, Unwin and Parker established the use of the super-block subdivision with groupings of houses designed in a unified architectural style, sited on cul-de-sacs that provided privacy from the busier main streets.[15]

The influence of the English Garden City movement in the United States was more

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discussion of the factors which influenced the development of the regional and community planning ideas of the RPAA.

[12] Donald A. Krueckeberg, ed., Introduction to Planning History in the United States, (New Brunswick, N.J.: The Center for Urban Policy Research, Rutgers University, 1983), pp. 28-29.

[13] Lubove, p. 18.

[14] Ibid. Lubove's Chapter 2, pp. 17-29 is a detailed discussion of the relative effects of restrictive vs. constructive legislation on housing quality and supply in the U.S. in the first two decades of the 20th century.

[15] Ames and McClelland, draft bulletin, section entitled "The American Garden City Movement." Also see Raymond Unwin, *Town Planning in Practice*, (New York, NY: Princeton Architectural Press, 1994, reprint of original 1909 publication), contains a complete discussion of the English Garden City designs.

sporadic. Unwin's 1909 publication Town Planning in Practice, which explained much of his planning and design theory through the example of his Garden Cities, and subsequent speaking tours through the U.S. served as a resource for American planners, architects and landscape architects. New communities reflecting the influence of English Garden Cities included Forest Hills Gardens, New York (1909-1911), a privately funded community for low-income families, and Kingsport, Tennessee designed by John Nolen (1915).[16] The majority of working class developments during this period however, were based on speculative profit and continued the sprawling expansion of the cities where industrial employment was centered, with rows of identical closely spaced bungalows and duplexes built on narrow lots on a repetitive street grid system.

A pivotal period of Garden City-influenced building in the United States occurred during World War I when government agencies funded the construction of defense housing communities. In addition to the direct influence of Unwin's 1909 book describing his town plans, architect Frederick Ackerman traveled to England to study the Garden Cities of Unwin and Parker and the defense worker communities of the British government. The resulting American planned communities, including Yorkship in Camden, New Jersey and Seaside Village in Bridgeport, Connecticut, were designed by groups of planners, architects, landscape architects, and engineers, and financed by the federal government through the United States Housing Authority and the Emergency Fleet Corporation.[17] Designed specifically for the working class employed in defense industries, these communities demonstrated the possibilities for collaborative planning and "constructive" government action, considered necessary components in the construction of new communities and the improvement of lower and middle class housing.[18]

Collaborative planning, developed through Garden City theory and the American defense-housing crisis, found application as well in the evolution of city and regional planning. The problems of rapidly expanding cities without plans had become a focus of attention following the 1894 Chicago World's Fair. The elegant Beaux-Arts design of the fair grounds and buildings, under the supervision of Chicago architect Daniel Burnham, ignited an American desire for orderly city function and growth. Burnham's 1906 Plan for Chicago marked the beginning of an era dedicated to developing city growth-planning strategies, which culminated in the publication of the Regional Survey of New York and its Environs (1929). However, these plans did not successfully address the issues of privately funded speculative building and the lack of decent working class housing. In the United States, housing needs reached crises proportions following WWI when rising construction costs resulted in the collapse of the speculative housing industry.

In 1923, an eclectic group of professionals dedicated to the idea of truly "regional" planning gathered to form the Regional Planning Association of America (RPAA). Included among the founding members were architects Clarence Stein and Fred Ackerman, landscape architect Henry Wright, social theorists Benton MacKaye and Lewis Mumford, and real estate investor/philanthropist Alexander M. Bing. Unhappy with the focus of the city-centered regional plans being developed, the RPAA's Preamble described their vision:

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[16] Ames and McClelland, draft bulletin, section entitled "The American Garden City Movement." See also Walter L. Creese, The Search for Environment. The Garden City: Before and After, (New Haven, CT: Yale University Press, 1966), p. 302, for a discussion of the influence of the British Garden City on the planned communities of John Nolen.

[17] Creese, pp. 302-303, and Ames and McClelland, draft bulletin, section entitled "The American Garden City Movement."

[18] Lubove, p. 17.

> A regional plan calls for new population centers, where natural resources will be preserved for the community, where industry may be conducted efficiently, and where an adequate equipment of houses, gardens, and recreation grounds will ensure a healthy and stimulating environment.[19]

The RPAA's regional vision sought to change the social organization of urban versus rural areas, combining the diverse components of both urban and rural community in smaller centers spread throughout a region.[20] Rather than continuing what they saw as unhealthy and unattractive speculative growth around the industrial city centers, members of the RPAA envisioned the development of new towns within a region, which would support their own populations through the establishment of local industrial employment. Not limited to New Town development only, their vision included also the redesign of city-edge developments and reconstruction of blighted neighborhoods within the city through comprehensive planning.[21] RPAA members believed that planned neighborhoods in the city and the city suburbs could successfully combine quality housing, open space and affordability.

Construction cost reductions, suggested first by Unwin in his use of cul-de-sacs and attached houses, and refined in Henry Wright's exhaustive cost-analysis studies, were central to the various community designs. To include the "adequate equipment" in all of these environments, innovative planning free from restrictive zoning and built on a large-scale (rather than the piece-meal building of speculative builders) could potentially reduce overall costs, producing a quality community or neighborhood for low or moderate income families.

Primary to the philosophy of the RPAA was the suggestion that the post-war housing shortage was a crisis of funding, not a crisis of supply.[22] The example of successes by the government-funded planned communities both in English and U.S. defense housing convinced members of the RPAA that a stable source of funding or credit, combined with their vision of detailed comprehensive planning and construction cost savings, could result in attractive, healthy, and safe housing for Americans in the low and middle income brackets.

In order to demonstrate their planning theory, the RPAA established the City Housing Corporation, a limited dividend corporation dedicated to the construction of affordable housing and Garden City style community planning. Their two planned communities, Sunnyside Gardens (1924) and Radburn (1928), demonstrated and refined many of the RPAA ideas, but Radburn in particular established a precedent for comprehensive community design. What eventually became known as the "Radburn Idea" encompassed a number of design elements previously utilized in various developments, but at Radburn these were synthesized into a unified town plan. Of particular importance were the super-blocks with cul-de-sacs and interior landscaped parks, the neighborhood unit based on the number of children required to support an elementary school,[23] and a hierarchy of road uses. New concepts included the reverse-front house with integrated garage, and pedestrian pathways. The "Town for the Motor Age" was sited 12 miles from New York City, near a planned highway and rail line providing easy access to the mid-level employment of most of the residents. Although the designers intended Radburn

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[19] The Regional Planning Association of America, Preamble, June 8, 1923, box 10, file 12, The Clarence Stein Collection, Rare Book and Manuscript Collections, Cornell University, Ithaca, NY.

[20] For a complete understanding of the RPAA vision see Roy Lubove, Community Planning in the 1920's: The Contribution of the Regional Planning Association of America, (Pittsburgh, PA: The University of Pittsburgh Press, 1963).

[21] Wright, Rehousing Urban America, p. 12.

[22] Lubove, p. 73.

[23] Stein, Toward New Towns for America, p. 50-51; as suggested by Clarence Perry, Regional Survey of New York and Its Environs, Vol. 7, 1929.

to be a fully self-sufficient commercial and industrial town of 25,000 in the vein of a true Garden City, that dream was never realized. With the 1934 bankruptcy of the City Housing Corporation, a consequence of the Great Depression, Radburn and Sunnyside effectively highlighted the RPAA suggestion that the housing industry would only remain stable through a government or foundation backed source of funds or mortgage credit.

The Depression served as a catalyst for significant additional experimentation with the "Radburn Idea." In 1932, under contract with the privately funded Buhl Foundation, Stein and Wright began construction of their final private collaboration, a planned community called Chatham Village at Pittsburgh, Pennsylvania. Combining their exhaustive construction cost analysis with the Radburn principles of central open space, reverse-front housing, pedestrian safety, and automobile accommodation, the design successfully demonstrated the economic feasibility and livability of high-density attached housing for lower-income residents.[24] Retained under single ownership by the Foundation and maintained as a rental community, Chatham Village avoided the financial instability of individual sale experienced at Sunnyside and Radburn. Chatham Village also included the rare, and possibly the first, use in the United States of a protective greenbelt around much of the developed property.

Perhaps the most significant influence of the "Radburn Idea" and the cost-savings demonstrated at Chatham Village came with President Franklin D. Roosevelt's New Deal response to the growing numbers of displaced families during the Depression. The Resettlement Administration undertook the design and construction of a series of "greenbelt" towns beginning in 1935, a first in government-funded housing for low-income families. Probably the most comprehensive use of the regional and community planning theory of the RPAA and the technical achievements of Radburn and Chatham Village, only three greenbelt towns were actually completed, Greenbelt, Maryland, Greenhills, Ohio, and Greendale, Wisconsin. Stein and Wright served on the planning staff for two of the projects; their Garden City style approach to community planning as well as their solutions to health and safety were particularly apparent in the design of Greenbelt, Maryland, the largest and most complete of the three towns.[25] The Tennessee Valley Authority (TVA), another federal New Deal response operating on a regional scale, was also impacted by the Radburn experiment.[26]

The broader housing and financial reforms brought about by the National Housing Act of 1934 made limited use of planning principles established at Radburn and refined at Chatham Village. Beginning with the President's Conference on Home Building and Home Ownership in December of 1931, government interest in improving housing conditions and financial stability began to extend beyond restrictive zoning. Among the conclusions laid out in the report of the Committee on Subdivision Layout, the influence of the Radburn experiment could be found, particularly the emphasis on developing subdivisions based on the Neighborhood Unit principle.[27] Henry Wright, who served on the Subdivision Committee, provided technical information concerning design of the Neighborhood Unit as well as his economic analysis for

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[24] Henry Wright wrote numerous articles and reports on his analysis of housing costs including "Summary and Further Development of 'A Housing Research' for the Consideration of Illinois," 1932; "Costs of Housing," in *Architectural Forum*, March 1932; and "Comparative Cost Studies of New Group Dwellings," in *Architectural Record*, Vol. 71, March 1932.

[25] Elizabeth Jo Lampl, "Greenbelt, Maryland Historic District," NHL documentation, 1996, p. 23.

[26] Eugenie Ladner Birch, "Radburn and the American Planning Movement: The Persistence of an Idea," Introduction to Planning History in the United States, Donald A. Krueckeberg, ed., (New Brunswick, N.J.: The Center for Urban Policy Research, Rutgers University, 1983), p. 129.

[27] "The President's Conference on Home Building and Home Ownership. Tentative Report of the Committee on Subdivision Layout." December 3, 1931, The Henry Wright Papers, box 3, file Dec. 3, 1931, Rare Books and Manuscripts Collections, Cornell University, Ithaca, NY, p. 17.

Radburn.[28] Much of what was discussed and concluded at the President's Conference found its way into the institutional guidelines governing subdivision development compiled by the Federal Housing Administration (FHA). The FHA, created by the 1934 Housing Act, established a framework for federal government-insured mortgage loans, providing the investment security sought by private banks and investors. Mortgage security, an important component in the community building vision of the RPAA, actually served to jump-start the commercial, profit-driven building industry. FHA design standards intended to ensure stable property values for low and middle class subdivision developments included "desirable" elements from the Radburn plan were specifically cited, in particular the designation of open-space for use by residents.[29] The Large Scale Housing Division of the FHA developed standards for low-cost rental housing; garden apartment communities eligible for FHA mortgage insurance drew on the Chatham Village experience.[30] However, the integrated community vision of the Radburn and Chatham Village designers, with incorporated diverse land-uses and a focus on neighborhood interaction, was lost to the over-riding emphasis on stable property values.

Much of later American suburban subdivision development planning was directly influenced by the FHA guidelines established in the 1930s. Although the plans were clearly improved by the planning elements demonstrated at Radburn and Chatham Village, the focus of real estate development continued to be profit-driven, generally exclusive of the lower classes, and devoid of regional vision. A few later experiments with planned communities, including Baldwin Hills Village, Los Angeles, California (1941) with Clarence Stein as consultant, Reston, Virginia (1961), and Columbia, Maryland (1963), continue to confirm the economic and social theories developed by the RPAA.

Peopling Places

Post-industrial revolution urban overcrowding and decay initiated the first migration of upper class families to commuter suburbs on the rural edges of the city. These early experiments with suburban design were influenced by the romantic, naturalistic ideals of landscape designers such as Frederick Law Olmsted, Sr., Calvert Vaux, and Alexander Jackson Downing. The curving streets following natural topography and large building lots with landscaping were designed to improve the physical and mental health of the occupants. Such developments were also designed to be exclusive of the lower classes. Working class families were unable to afford the large lots and houses. They could not afford the transportation costs from such suburbs to their industrial employment located in the urban centers.

Beginning around 1890, the streetcar provided the cheap transportation necessary for the working and middle class movement to the city's edge. Speculative builders quickly subdivided the land along the established "gridiron" street plan into endless rows of narrow lots, known as "streetcar suburbs." But costs were only kept within the moderate range by reducing lot widths, allowing more and more houses to be squeezed into increasingly undesirable neighborhoods lacking light, air and open space. This plan served equally well for the speculative development fueled by the increased availability of the automobile following WWI, which spurred renewed subdivision on the ever-expanding edges of the city.[31]

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[28] Ibid, List of References.

[29] Federal Housing Administration, *Planning Neighborhoods for Small Houses*, Technical Bulletin No. 5, (Washington, D.C., July 1, 1936), p. 24.

[30] Ames and McClelland, from section entitled "The American Garden-City Movement," draft bulletin.

[31] Peter G. Rowe, Making a Middle Landscape, (Cambridge, MA: The MIT Press, 1991), pp.3-4.

Appalled by the unplanned and unhealthy growth of the American city, the Regional Planning Association of America (RPAA), established in 1923, proposed dramatic reorganization of urban growth through a planned regional approach. Planned "new towns" would house low and middle class workers, complete with de-centralized regional industries, commercial centers, educational and recreational facilities. Drawing upon the social theory of Ebenezer Howard's Garden City concept, Raymond Unwin and Barry Parker's physical Garden City experiments in England, Henry Wright's community plans in Missouri (1910s), and the successes of the U.S. government's defense housing communities constructed during WWI, the RPAA sought to develop their own demonstration Garden Cities. Through the City Housing Corporation, a limited dividend corporation funded by private investments, Sunnyside Gardens in New York City (1924) and Radburn, New Jersey (1928) were constructed, according to the detailed plans and designs of RPAA core members Clarence Stein and Henry Wright. Although neither Sunnyside or Radburn achieved the ideal of the Garden City, both served to demonstrate evolving theories of city, subdivision, and regional planning as well as applying innovative features which provided affordable, quality middle class housing.

The Buhl Foundation was established in 1927, funded with a bequest of thirteen million dollars by department store owner Henry Buhl Jr. (1848-1927). Founded specifically to help the people of Pittsburgh, the construction of Chatham Village was the Foundation's initial project. Dr. Charles F. Lewis, the first director of the Buhl Foundation, described the development of Chatham Village as "an effort to build a new kind of community for a new and finer kind of urban living."[32] Funded entirely by the Foundation, the project served a dual purpose for the Foundation, first as an attempt to improve the standard of available housing for moderate-income families in Pittsburgh. The project was additionally developed "as a for-profit venture, managed as a long range investment without undue risk to its principal so that the income from the investment would fund the Foundation's other philanthropic programs."[33]

Beginning in 1929 with the planning stage, Chatham Village would be the last privately funded collaboration of Stein and Wright in which their planning and design theories were demonstrated. According to Stein, "the success of Chatham Village was in large part due to two years of preliminary study."[34] In addition to research into funding new community construction such as that of the City Housing Corporation, the Buhl Foundation had a survey of Pittburgh's housing market and needs prepared by the University of Pittsburgh Bureau of Business Research.[35] Although, like the City Housing Corporation at Radburn, the Foundation found that their target population of lower middle class workers preferred detached single-family homes, Wright and Stein's site analysis revealed construction costs of individual houses would be too high. Henry Wright had been at the forefront, particularly at Sunnyside Gardens, of solutions to housing problems through the development of cost-saving house plans. His recommendations for group housing, kept under the single-ownership of the Foundation, were pivotal in the final innovative plan for Chatham Village.[36]

Many of the individual elements of Chatham Village were previously used in earlier

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[32] 'Three Elements in Ideals and Ideas of Chatham Village." Chatham Village News. October 19, 1932. p. 1, as cited in Vater, "Chatham Village Historic District," National Register documentation, 1996, Section 8, p. 2.

[33] Vater, "Chatham Village Historic District," National Register documentation, 1996, Section 8, page 2.

[34] Clarence S. Stein, Toward New Towns for America, (New York, NY: Reinhold Publishing Corp., 1957), p. 75.

[35] Ibid.

[36] Henry Wright, Rehousing Urban America, (New York, NY: Columbia University Press, 1935), pp. 46-50; according to Stein, "Henry took lead" in the planning of Chatham Village (Phase I, 1929), The Clarence Stein Collection, Box 1, binder (pencil notation in his list of projects), Rare Books and Manuscripts Collections, Cornell University, Ithaca, NY.

innovative community plans, particularly at Radburn, however this community on the edge of the city of Pittsburgh was the first in the United States to include a protective greenbelt of undeveloped land. As a part of a subdivision specifically geared toward lower-income residents, the luxury of readily available open-space (in addition to the interior greens) was made possible by dramatic cost-savings in the large-scale construction of attached group housing and the resourceful use of hillside (cheap) land. Like Radburn, savings were also realized through the use of the superblock plan, reducing infrastructure construction costs of roads and utilities.

Perhaps most significant to the continued success of the Chatham Village community was the decision of the Buhl Foundation to retain single ownership rather than to sell the individual dwellings as at Sunnyside and Radburn. Built during the height of the Depression, and cognizant of the difficulties of the homeowners at Sunnyside and Radburn, Dr. Lewis of the Buhl Foundation decided that the whole of Chatham Village would remain in Foundation ownership. Dwellings would be rented at rates affordable for "moderate-income clerical workers," their target population.[37] This decision motivated the Foundation to construct the houses with materials requiring low maintenance such as brick, slate, and copper, in addition to emphasizing the quality landscape setting of the buildings. Although more expensive at the outset, the long-term commitment allowed the Foundation to invest more initially with an eye to a return on that investment over several decades of ownership. Their investment was not misplaced; Chatham Village has had 100% occupancy since its beginning, prompting Stein to note in 1956:

> Experience at Chatham Village demonstrated, as compared with Sunnyside, the fallacy of the American faith, almost a religious belief, in what is called "home ownership."[38]

The Buhl Foundation sold the Chatham Village property to Chatham Village Homes, Inc. a resident's cooperative, in 1960. Still under the single-ownership of the Association, residents do not receive title to the house in which they live; they instead purchase a membership in the Association.[39]

The Chatham Village plan served as a significant influence on the federally funded "greenbelt" towns constructed by Roosevelt's Resettlement Administration beginning in 1935. Both Stein and Wright were employed as planning consultants by the federal government. Incorporating several elements of the Chatham Village plan not found at Radburn, the town of Greenbelt, Maryland was the first and most complete of the government's planned communities. In particular, the Garden City concept suggested by Howard in 1898, that the Garden City should be held under single or associative (community) ownership to remove the speculative nature of development and reduce the cost of greater amenities for all class levels. The federal government retained ownership of the town of Greenbelt for nineteen years. In 1952, ownership was transferred to the Greenbelt Veterans Housing Corporation, a non-profit organization of resident members.[40] Also, Greenbelt, like Chatham Village, employed a Garden City-style greenbelt of open land surrounding the community. And finally, the attached group housing at Chatham Village had proven its worth in construction cost-savings; designed for very low-income displaced families, group housing was necessarily used at Greenbelt as well.

As members of the RPAA and proponents of sane regional planning, Stein and Wright were hopeful that their community concepts would be repeated throughout the United States.

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[37] Stein, Toward New Towns for America, p. 80.
[38] Stein, Toward New Towns for America, p. 85.
[39] Vater, "Chatham Village Historic District," NR documentation, 1996, section 8, page 4.
[40] Elizabeth Jo Lampl, "Greenbelt, Maryland Historic District," NHL documentation, 1996, p. 45.

Writing in 1933, Stein noted:

> The same idea (as on open farmland at Radburn) of safety, large common open spaces and complete community equipment should be applied not only to the building of the outskirts of the city and the partially developed sections as it was at Chatham Village in Pittsburgh, but also to the rebuilding of the older blighted areas. Anything less than the building of complete neighborhood communities is pure waste.[41]

To some degree Stein's plea was answered in the following decades by a variety of garden court communities across the U.S., additionally stimulated by the FHA's Large Scale Housing Division. According to a 1950 Buhl Foundation report, Chatham Village was indeed "A Demonstration Widely Copied."[42]

> Travis G. Walsh, then vice-chairman of the committee on industrial relations of the American Institute of Architects, in 1939 told a national housing conference: "Chatham Village is a forerunner of much of the multiple-dwelling type of development that is country-wide today." Many of the large-scale communities built throughout the country by leading life insurance companies have been influenced by the Chatham Village precedent. Speaking of the first huge developments of the Metropolitan Life Insurance Company, William Stanley Parker, chairman of a committee of the American Institute of Architects, said: "The Metropolitan is blazing the trail which The Buhl Foundation started at Chatham Village." In announcing, in 1946, the John Hancock Mutual Company's delightful development in Brookline, Mass, *The Christian Science Monitor* reported that the complete pattern would be "similar in many respects to such outstanding model communities as Chatham Village in Pittsburgh." Many of the finest communities built under "Title Two" insured mortgages of the Federal Housing Administration have closely followed the Chatham example and in some cases have had the full benefit of whatever counsel the Foundation could give from its experience.

Additional examples of planned communities influenced by the Chatham Village plan were noted in Vater's 1996 National Register documentation:[43]

> Several communities throughout the country were patterned after Chatham Village with its notable financial reputation as a dependable, long-term investment. Among the visitors and observers of Chatham Village's success were groups of bankers from New York, investment specialists from the great insurance companies of the east, trust fund administrators from the mid-west, and government housing administrators.[44] They borrowed ideas from Chatham

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[41] Clarence S. Stein, "Housing and the Depression," *The Octogon*, June 1933, no. 6, p. 5, The Clarence Stein Collection, box 4, file 3, Rare Books and Manuscripts Collections, Cornell University, Ithaca, NY.

[42] "The Buhl Foundation Report for the period Ended June 30, 1950," pp. 80-81, The Clarence Stein Collection, box 1, file 39, Rare Books and Manuscripts Collections, Cornell University, Ithaca, NY.

[43] Vater, "Chatham Village Historic District," 1996, section 8, page 6.

[44] The names of bankers and insurance company executives are recorded in the "Chatham Village Guestbook" in the archives of Chatham Village Homes, Inc. See also the article by David Vater "Les Visitur Celebre!" in *Chatham Village Times*, January, 1997, p. 3-5. See also "Bankers View Housing Plan" *Pittsburgh*

Village for their projects. Clarence S. Stein planned Hillside Homes in 1935 in the northern Bronx, NY as moderate cost rental housing with four story units for one thousand four hundred sixteen families, playground and community center, with landscaped courtyards remote from street traffic.[45] Buckingham Community in Arlington, VA of 1937 planned by Henry Wright provided rental housing for one thousand fourteen families on approximately one hundred acres[,] Colonial Village in Arlington, VA, of 1935 - 37 designed by Harvey Warwick provided nine hundred seventy-four attached rental homes[,] The Falklands in Silver Spring, MD, of 1937, 1938 designed by Louis Justement provided attached homes in garden setting for four hundred seventy-nine families.[46] Olentangy Village, near Columbus, OH of 1938 planned by Raymond C. Snow provided attached housing with garden courts for four hundred three families on sixty-seven acres. Wyvernwood, Los Angeles, CA of 1940 provided two story attached homes facing inward on garden courts for one thousand one hundred two families on seventy acres, with winding streets, underground utilities, and a rental basis. Baldwin Hills Village, Los Angeles, CA, now known as the Village Green, of 1940-41 planned by Reginald Johnson, Robert Alexander, and Clarence Stein with landscape architects Fred Barlow and Fred Edmonson was a rental garden home complex of six hundred twenty-seven units on eighty acres with a large central green.[47]

Although elements of the Chatham Village plan appear in the garden apartment-style public housing of the 1960s, these often did not achieve Stein's vision of "complete neighborhood communities" in the "rebuilding of the older blighted areas."[48] A recent article in *The Washington Post Magazine* described the "urban renewal" public housing project known as Kentucky Courts.[49] Built in 1960 and consisting of two sites, the "three-story garden apartment buildings would surround interior courtyards, so that the 'front' doors would open on the courtyards and the 'rear' doors on the street."[50] Although the design appeared sound, like so many other public housing projects Kentucky Courts did not fit into the older Washington neighborhood it had replaced; and lacking the maintenance commitment of its owner (the Washington, DC public housing authority) it fell into disrepair, to be demolished in 2001.

Expressing Cultural Values

The emerging American middle class of the 1920s found improvements to their lifestyle, particularly the automobile, becoming more available and affordable to them. The freedom to move away from the crowded city provided by the automobile was stifled however, by the profit-driven nature of subdivision development after WWI. With rising housing costs came

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Press, October 25,1936, for list of bankers representing half a billion dollars of investment funds who visited Chatham Village to study it as an example of model housing as a secure investment.

[45] Stein, Toward New Towns for America, 1951 [no page cited].

[46] Several similar communities are listed in "Large Scale Housing, Its Past, Its New Status, Its Problems, Its Possibilities." *Architectural Forum*. February, 1938, p. 110-124.

[47] Stein, Toward New Towns for America, 1951 [no page cited].

[48] Clarence S. Stein, "Housing and the Depression," *The Octogon*, June 1933, no. 6, p. 5, The Clarence Stein Collection, box 4, file 3, Rare Books and Manuscripts Collections, Cornell University, Ithaca, NY.

[49] Jim Myers, "Requiem for Kentucky Courts," *The Washington Post Magazine*, July 1, 2001.

[50] Ibid, p. 23.

diminishing quality of construction, design and setting. The Buhl Foundation sought to provide the kind of quality housing and atmosphere desired by middle class working families, recently demonstrated at Sunnyside and Radburn by the City Housing Corporation. Through their detailed planning focused on reducing costs in construction and long-term maintenance, the Foundation could provide at Chatham Village, quality housing at a comparable cost to that of the speculative builders, but in a safe, attractive, and healthful setting usually reserved for the upper classes.

Beginning in 1929, the Foundation carefully surveyed the housing needs of the Pittsburgh area in order to provide the kind of accommodation their target moderate-income population would happily occupy.[51] Their responses centered on safety from automobiles, affordability, health, and modern convenience. As was found prior to construction at Radburn, the respondents in Pittsburgh also indicated that the single-family detached house was their dwelling of choice.[52] Clarence Stein and Henry Wright, who formulated the site plans for Chatham Village, discovered however that construction of freestanding houses on the hillside site would be too expensive for the target population of clerical workers. "On the other hand, row houses, based on the Sunnyside experience, could be built for about two thousand dollars less per house."[53]

For Wright, attached group housing held the key to producing affordable, desirable communities for the emerging middle class. His exhaustive cost-analysis of middle class housing types was recorded in his 1935 book Rehousing Urban America. Under the chapter heading "A Case for Group Housing," Wright described how the qualities of good housing sought by American families could be achieved through thoughtful planning and the use of grouped houses:

> Our criteria [for housing] are of a more general and deep-lying sort. They must be found by observing certain human needs common to everybody, whether the families be large or small, and whether the people be young or old. For instance, every household requires good light and ventilation. The best means of securing this will be by some kind of *shallow plan*. Good light and good view, as well as the need for open recreation space, require massed spaces of open land. Since urban land is necessarily expensive, the purchase of additional quantities of it is to be avoided. The natural expedient then is to "borrow" vacant land that is useless because of its location. This can be done by rearrangement of the plan, eliminating dark side yards and alleys. This arrangement in turn leads naturally to building the houses themselves in closed groups or rows.[54]

The decision by the Buhl Foundation to follow the recommendations of Wright and Stein concerning the construction of grouped rowhouses actually determined the financial stability of the project, built and occupied at the height of the Depression. Believing that rowhouses would be difficult to sell, the Foundation determined to retain single-ownership of the entire community and pursue a rental policy.[55] The Foundation's commitment to quality and maintenance, considered necessary to ensure a return on their investment, was instrumental in the long-term

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[51] Stein, Toward New Towns for America, p. 75.
[52] Wright, Rehousing Urban America, p. 42.
[53] Stein, Toward New Towns for America, p. 75.
[54] Wright, Rehousing Urban America, p. 29.
[55] Wright, Rehousing Urban America, p. 49.

success and integrity of the community.[56]

The grouped rowhouses at Chatham Village determined its distinctive design; a neighborhood community plan which would address the needs of the families intended to occupy them. Foremost on everyone's list was affordability. Wright had established the cost-savings in the construction of attached dwellings through his analysis at Sunnyside Gardens, particularly by the use of continuous foundations, shared walls, and "continuous erection processes."[57] Additional savings at Chatham Village were realized through creative use of the hillside site. Rather than having to grade individual house sites, the planners found the grouped rows allowed for large-scale grading of terraces with the foundations serving as retaining walls.[58] As had been previously demonstrated at Radburn, the plan for large "superblocks" with peripheral roads produced savings in construction costs through reduced investment in infrastructure for road paving and utilities. Wright noted in 1932 that, "...the most efficient row units could be heated by gas usually available only to people of larger incomes and the electric service company will place all wires underground (an improvement not usually applied in detached house communities even of relatively expensive grade)."[59]

Affordability, while meeting the rising expectations of the American middle class, was further ensured by the farsighted vision of the Buhl Foundation itself. Their long-term commitment to housing mid to lower-income families and to realizing modest investment returns from the project dictated greater initial investment in high-quality materials such as brick, slate, and copper. These materials not only reduced building maintenance costs, they resulted in housing with an elegant appearance. According to Stein, the 100% initial investment in the project, along with lower management and maintenance costs under single ownership, allowed rents to remain reasonable while averaging over 4% net return on the investment.[60] And best of all, they maintained a 100% occupancy rate, a sure indication that Chatham Village fulfilled the cultural values of the aspiring middle class.

Chatham Village's hillside site served well in the execution of the plan to secure a safe environment in which the pedestrian and automobile would be completely separated. Following lower contours of the hillside around the superblocks, the peripheral roads Olympia, Sulgrave, Bigham, and Pennridge provided automobile access to the garage space on the service side basement level of the houses. For the up-hill side houses not provided with basement-level garages (see cross-section view, Stein p. 79), garage compounds were conveniently located, and according to Stein, "found satisfactory in spite of the American habit of keeping a car in the house as some European farmers keep their cattle."[61] The courtyard interiors, located on the higher terraced levels, were provided with pedestrian pathways connecting all the houses of the Chatham Village neighborhood, as well as allowing safe access to the garage compounds and the commercial area at the northeast corner of the development.

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[56] Stein, Toward New Towns for America, pp. 84-85.

[57] Wright, Rehousing Urban America, p. 30.

[58] Wright, Rehousing Urban America, p. 50.

[59] Henry Wright, "Summary and Further Development of 'A Housing Research' for the Consideration of the Temporary Housing Commission of Illinois," 1932, pp. 43-45, Henry Wright Papers, box 3, Rare Books and Manuscripts Collections, Cornell University, Ithaca, NY.

[60] Stein, Toward New Towns for America, pp. 78-80. The success of the Buhl Foundation's 100% investment in high quality moderate-income housing appears to have demonstrated the validity of the 'constructive housing' premise of the RPAA, that quality low and middle class housing would only be constructed with the stable funding source and long-term investment of the government or a foundation such as the Buhl Foundation. Speculative builders, who sought immediate profit rather than long-term investment, were limited only by the 'restrictive' housing codes and zoning associated with Progressive Era reforms for minimal quality assurance. See Roy Lubove, Community Planning in the 1920's, 1963, pp. 17-29, for a complete discussion.

[61] Stein, Toward New Towns for America, p. 76.

Open space, light, and air considered necessary for healthy living in "modern" America was provided through the enclosed courtyards created by the surrounding house groups. The interior open space of the courts was the manifestation of Wright's "borrowed vacant land," removed from the traditional house lot's narrow side yards. Shallow, two-room deep dwellings assured light and air to every room in the house. More than just a source of air and light, the fine landscaping of the interior courts was significant to the Chatham Village neighborhood character, described by Vater in his 1996 National Register documentation,

> ...the landscape identity of the model community was created from the ground up by one of the region's most gifted landscape architects, and defined a new interpretation for the role of greenery and outdoor space in urban life. [Ralph E.] Griswold's interpretations of the Garden City concept supplied the pervasive "garden" character for the neighborhood, as a seamless setting of this planned community. The landscaping in Chatham Village is put to work to define the many different degrees of privacy needed to make such an innovative and compact layout of homes into a pleasurable community. Spaciousness is also enhanced by the plantings which seem to extend the modest physical dimensions. The importance of these many gardens is that they allow a daily contact with nature and provide open space for light, air, and recreation. The horticultural contributions were one of the strong points of the design and resulted in one of the most harmoniously landscaped neighborhoods in the city.[62]

Hedges, shrubs and trees assured some measure of privacy, enhanced by the various levels of the terraces. Landscape features such as the quaintly designed garden sheds, gazebos, brick and stone walls, and the profuse flowering plants created an elegant atmosphere that mirrored the Georgian Revival styled house groups.

The group housing at Chatham Village reduced costs, improved infrastructure, and freed-up open space. However, the higher density of the rowhouses, according to Wright approximately 128 units rather than 78-84 detached houses, was achieved without a loss of interior living space.[63] Houses were available in two, three, or four bedroom sizes, each with the modern interior conveniences middle class American families had grown to expect as standard in housing, including electric kitchen, full bath, laundry, and many with a basement garage.

Like the houses of Radburn, the "reverse-front" house plan was employed at Chatham Village, described by Wright as "the house with two fronts, one for convenient service, the other for peaceful living..."[64] The plan placed the living areas (living room, dining room, and bedrooms) of the house on the reposeful garden side, and the service areas (kitchen, laundry, and garage) on the street side. The positioning of the various rooms made the best use of the site plan as well, placing rear garages (away from the pedestrian side) along the peripheral roads, and front doors toward the pedestrian walkways. With their fronts turned toward the central green, street noise was all but eliminated on the interior; on the exterior, it evoked the image of a "traditional" colonial American village. Peter Rowe, in analyzing modern housing, described this image creation in architecture as "spatiotemporal masks,"

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[62] Vater, "Chatham Village Historic District," 1996, section 8, page 7.

[63] Wright, Rehousing Urban America, p. 48. Descriptions of house plans included in Wright's discussion note the Chatham Village houses were 20 ½ feet wide and 26-28 feet deep, while houses at Radburn were 18 ½ feet wide, with a smaller third bedroom (see p. 49).

[64] Wright, Rehousing Urban America, p. 54.

> Allusions to other times and other eras, amid contemporary circumstances, certainly blur the impact of the present, allowing notions of continuity to be reestablished and even traditional values to be reawakened.[65]

In the rapidly changing world of the early 20th century, the allusion to pre-industrial values was a real source of comfort. Despite increased middle class reliance and demand for technological improvements, yearning for a "simpler time" influenced the value placed on open-air, healthy environments and the return to living in "the country."

Vater portrayed the significance of the Chatham Village architecture in his 1996 National Register documentation, [66]

> The architecture at Chatham Village, with all of its domestic thoughtfulness quietly fulfills its role as good decent housing. With more than two hundred families housed on less than fifteen acres, the sheer volume of buildings rendered in a more assertive manner could easily have been too much. At Chatham Village the architecture by intention takes a secondary role to the more persuasive sense of overall harmony. The architecture becomes the stately background to the light, air, and gardens of the Garden City concept. The subtle mastery of the architecture at Chatham Village lies in the cumulative benefit of its successful interrelationship with the planning and landscape design. It should be judged as a comprehensive development on a neighborhood scale.
>
> In 1940, Ingham & Boyd were awarded medals by the American Institute of Architects and the Fifth Pan-American Congress of Architects for their architectural designs. In 1976 Chatham Village was awarded a national design award by the United States Department of Housing and Urban Development.[67] In 1976, when the American Institute of Architects selected the proudest achievements of American Architecture over the past two hundred years, Chatham Village was one of three sites selected in Western Pennsylvania - the others being Frank Lloyd Wright's Fallingwater and Henry H. Richardson's Allegheny County Courthouse and Jail.[68]

The neighborhood continuity, open space and quiet of the interior courts, as well as protection from future unplanned development at Chatham Village was ensured by the permanent protection of a "greenbelt" of undeveloped land and an adjoining county park. In a nod to the Garden City concept of the protective agricultural greenbelt, the Buhl Foundation designated approximately twenty-five acres of very steep wooded land as "Chatham Wood." It served not only as a buffer from encroaching development, but also as a recreation area for residents. Free time for recreation was a new concept enjoyed by middle class workers. Seen as an important component of healthy living, common recreational facilities were constructed adjoining the southern end of the community, the level ground achieved by dumping fill from the hillside grading for the houses on an area at the head of the Woods. Tennis and basketball courts, playgrounds, common gardens, a picnic area, and two miles of walking paths through the woods were provided to meet the recreational needs of Chatham Village residents. The original Bigham family farmhouse (c.1840), which overlooked Chatham Wood, was converted for use as

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[65] Peter G. Rowe, Modernity and Housing, (Cambridge, MA: The MIT Press, 1993), p. 33.
[66] Vater, "Chatham Village Historic District," 1996, section 8, page 9.
[67] "National Design Award." Pittsburgh Press, November 10, 1976. p. 19.
[68] David Vater, Chatham Village. A Bibliography, 1994. p. 8 1.

a community center and continues in that capacity today (2001).

The Chatham Village plan had drawn on the modern concepts of housing developed previously at Sunnyside and Radburn, but established new precedents that would infuence later projects like Greenbelt and Baldwin Hills. Lewis Mumford, a founding member of the RPAA, wrote in his 1951 introduction to the first edition of Stein's Toward New Towns for America:

> What he [Stein] and Wright demonstrated are not forms to be copied, but a spirit to be assimilated and carried further, a method of integration to be perfected, a body of tradition to be modified and transmitted – and in time transmuted into new forms that will reflect the needs and desires and hopes of another age.[69]

Through the adoption of design elements of Chatham Village, the Federal Housing Administration's Large Scale Housing Division influenced the standards for "garden apartment" complexes,[70] a continuing source of affordable, high-density housing with at least some associated open space, occupied by low and middle class Americans. A list of other communities that followed the Chatham Village example of garden courts and surrounding greenbelts appears in the Peopling Places discussion above. The Chatham Village "garden court" design continues to represent an expression of the American cultural value placed on open space and gracious living for middle class families.

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[69] Lewis Mumford, "Introduction," in Stein, Toward New Towns for America, p. 17.
[70] Ames and McClelland, from section entitled "The American Garden-City Movement," draft bulletin.

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Previous documentation on file (NPS):

____ Preliminary Determination of Individual Listing (36 CFR 67) has been requested.
_X_ Previously Listed in the National Register.
____ Previously Determined Eligible by the National Register.
____ Designated a National Historic Landmark.
____ Recorded by Historic American Buildings Survey: #
____ Recorded by Historic American Engineering Record: #

Primary Location of Additional Data:

____ State Historic Preservation Office
____ Other Agency
_X_ Federal Agency (NPS)
____ Local Government
____ University
____ Other (Specify Repository:

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10. GEOGRAPHICAL DATA

Acreage of Property: 46.4

UTM References:	Zone	Easting	Northing
A	17	583385	4476300
B	17	583800	4476020
C	17	583240	4475440
D	17	583000	4475600

Verbal Boundary Description:

See continuation sheet

Boundary Justification:

See continuation sheet

11. FORM PREPARED BY

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Date: 12 December 2003

Edited by:

Telephone:

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Verbal Boundary Description:

As described in the 1996 National Register documentation by David Vater: "The legal description of the property follows:

Parcel 1: Begin at south-west corner of the intersection of Virginia Avenue and Bigham Street N8°55'10"E 446.67' thence R=185.00' A=77.18' thence S8°04'50"E 90.87' thence N8°55'10"E 132.50' thence S81°04'50"E 402.37' thence N43°09'00"E 451.34' thence R=1535' A=208.16' thence N35°22'49"E 606.28' thence R=1105' A=615.54' thenceR=688' A=282.99' thence S89°08'09"E 72.59' thence S50°02'50"E 644.45' thence N54°49'10"E 287.27' thence N51°22'10" 240.49' thence N27°52'10"E 76.00' thence N55°32' 10"E 26.39' thence N81°32'10"E 22.49' thence N13°02'10"E 566.46' thence S78°51'40"E 392.72' thence N13°04'20"E 969.98' thence S78°51'40"E 513.16' to meet beginning point, an area of 45.716 acres.

Parcel 2: Begin at south-east corner of the intersection of Virginia Avenue and Bigham Street S78°51'40"E 200.15' thence N8°55'10"E 63.64' thence S81°04'50"E 100.00' thence N8°55'10"E 138.31' thence S81°04'50"E 100.00' thence N8°55'10"E 209.71' to meet beginning point, an area of 0.628 acres.

Parcel 3: Begin at north-west corner of the intersection of Virginia Avenue and Bigham Street S18°51'40"E 23.853' thence N8°55'10"E 50.00' thence S78°51'40"E 23.853' thence N8°55'10"E 50.00' to meet beginning point, an area of 0.027 acres.

The three parcels total 46.371 acres and shall be interconnected to be contiguous across adjoining roadways by lines parallel to nearest parcel corners."

Boundary Justification:

As stated in the 1996 National Register documentation: "The nominated historic district includes all of the associated resources of the Chatham Village development. The boundary excludes all resources not associated with the Chatham Village development."

These boundaries follow the original plan established by the Buhl Foundation and the have not changed since the establishment of Chatham Village.