1. NAME OF PROPERTY

Historic Name: Greendale Historic District

Other Name/Site Number: N/A

Designated a National Historic Landmark by the Secretary of the Interior on October 16, 2012.

2. LOCATION

Street & Number: See list in Section 7 Not for publication: N/A

City/Town: Village of Greendale Vicinity: N/A

State: Wisconsin County: Milwaukee Code: 079 Zip Code:

3. CLASSIFICATION

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

Number of Resources within Property

Contributing		Noncontributing	
buildings	387	buildings	39
sites	1	sites	0
structures	0	structures	5
objects	1	objects	0
Total	389	Total	44

Number of Contributing Resources Previously Listed in the National Register:

Name of Related Multiple Property Listing: “Historic Residential Suburbs in the United States, 1830 to 1960,” MPS

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 Commenting or Other 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:	**Sub:**
DOMESTIC	single dwelling
DOMESTIC	multiple dwelling
GOVERNMENT	city hall
GOVERNMENT	correctional facility
GOVERNMENT	fire station
GOVERNMENT	post office
LANDSCAPE	park
TRANSPORTATION	pedestrian-related
TRANSPORTATION	road-related (vehicular)
SOCIAL	meeting hall
COMMERCE/TRADE	restaurant

Current:	**Sub:**
DOMESTIC	single dwelling
DOMESTIC	multiple dwelling
GOVERNMENT	city hall
LANDSCAPE	park
TRANSPORTATION	pedestrian-related
TRANSPORTATION	road-related (vehicular)
EDUCATION	school
COMMERCE/TRADE	specialty store
COMMERCE/TRADE	restaurant

7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: Colonial Revival

MATERIALS: CONCRETE; BRICK
Foundation: CONCRETE
Walls: CONCRETE; BRICK; METAL: aluminum siding; SYNTHETICS: vinyl siding
Roof: CERAMIC TILE; STONE: slate; ASPHALT
Other:

INTRODUCTION

The Village of Greendale, Wisconsin, is one of three U.S. government-sponsored, planned communities built on the garden-city principles during the Great Depression of the 1930s. The "greenbelt" towns were planned and built between 1935 and 1938 under the short-lived Suburban Resettlement program of President Franklin D. Roosevelt's New Deal government. Each town embodies land-use planning principles, social concerns, construction methods, and architectural concepts that coalesced in the 1930s and were at the forefront of Federal housing policy that would trigger and help shape the massive suburbanization of American cities in the post-World War II era. Together as a finite set, the towns represent an unprecedented effort to build large-scale, low-cost, scientifically planned residential communities outside major urban centers for moderate- and lower-income Americans, while providing employment for skilled, professional, and unskilled workers during the Great Depression. Independently, each town represents the work of a collaborative team of talented town planners, architects, and draftsmen, and is a unique regional adaptation of American Garden City design, community planning principles, and timely innovations in large-scale building technology and home construction.[1]

The Village of Greendale was built as a model suburb for lower-income Americans and a demonstration of American garden-city planning and large-scale home building. It reflects the experimentation and collaboration of Midwestern town planners, Elbert Peets and Jacob S. Crane, and principal architects Harry H. Bentley and Walter G. Thomas. Under the direction of John Lansill and Frederick Bigger of the Suburban Resettlement program of the Resettlement Administration (RA), the four designers headed a collaborative team of more than 100 persons who helped design Greendale. The program was carried out with the advice of notable consultants, including architect-planner Clarence Stein, housing analysts Catherine Bauer and Edith Elmer Wood, and educator John Dewey. The community is notable for its advanced application of the Neighborhood Unit Plan, innovative design principles for grouping small houses, and improved low-cost methods of home construction. These principles were introduced in the 1920s in several American communities, the most notable being Radburn, New Jersey, and Mariemont, Ohio.[2] These concepts were overwhelmingly endorsed at the highly influential 1931 President's Conference on Home Building and Home Ownership and laid the foundation for the Federal government's concerted efforts in the 1930s to stimulate home construction and demonstrate an ideal model for safe, spacious, and healthy communities for lower- and moderate-income Americans. In combination with other Federally initiated reforms, including new mechanisms for mortgage lending and borrowing, Greendale and the other greenbelt towns set the stage for the expansive suburbanization of metropolitan areas in the United States in the postwar period.

An adaptation of garden-city planning principles, which were first introduced by English social reformer Ebenezer Howard in *Tomorrow: A Peaceful Path to Real Reform* (1898), to the climate, topography, and cultural preferences of the midwestern United States, the Village of Greendale meets NHL Criteria 1 and 4 under the NHL themes, Peopling Places and Expressing Cultural Values. The village meets NHL Criterion 1 for its association with highly significant activities that shaped the Federal response to the Great Depression by providing economic relief in the form of employment for skilled and unskilled labor and making use of modern principles of design and lower-cost methods and materials of home construction in an effort to stimulate the building industry and raise the quality of life for working-class Americans. The village also meets NHL

[1] The largest and most publicized of the three towns was Greenbelt, Maryland, which was designated a National Historic Landmark (NHL) 18 February 1997. Greendale was listed on the National Register 29 July 2005, and Greenhills, Ohio, was listed on the National Register 12 January 1989 at the national level of significance. A fourth town, Greenbrook, New Jersey, was planned but, due to legal issues concerning the acquisition of land, was never built.

[2] Radburn, designed in 1928-29 by members of the Regional Planning Association of American (RPAA), Clarence Stein and Henry Wright, was designated an NHL on 5 April 2005. Mariemont, Ohio, designed in 1921 by city planner John Nolen, was designated an NHL on 29 March 2007.

Criterion 4 for its artistic merit and outstanding demonstration of American garden-city planning, the widely acclaimed Neighborhood Unit Plan, and the state-of-the art, cost-saving measures of group housing and large-scale home construction. The Village of Greendale is a nationally significant historic residential suburb as defined in the nationwide Historic Residential Suburbs in the United States, 1830 to 1960, Multiple Property Submission (MPS).[3]

DESCRIPTION

The Village of Greendale NHL is based on the original plans designed by Elbert Peets (chief planner) and Jacob Crane (planner) in 1935–36 and revised in 1938 and the extent of the community built under the Resettlement Administration (RA) and Farm Security Administration between 1936 and 1938 with the assistance of labor funded by the Works Progress Administration (WPA). Peets was an accomplished designer and practicing landscape architect from Cleveland, Ohio, who was experienced in subdivision design and civic improvement. He was a scholar of European city planning and American Colonial town planning and, with partner Werner Hegemann, he published *The American Vitruvius: An Architect's Handbook of Civic Art* (1921). Crane was an experienced city planner from Chicago and a proponent of large-scale regional planning. He had recently served as president of the American City Planning Institute, and during the New Deal he represented Illinois and Wisconsin on the National Resources Planning Board.

The historic core of the incorporated Village of Greendale is best illustrated by a plan drawn by village manager Walter Kroening in 1946 (Figure 1). The historic district is characterized by separate systems of circulation for automobiles and pedestrians; a network of residential lanes and courts that accommodates groups of detached single family houses, pairs of semi-detached homes called "twins," and multiple-unit row dwellings; interspersed parks and recreational spaces; and a village center that integrates civic and commercial functions. The Village of Greendale today represents highly important aspects of New Deal policy, an important stage in the evolution of the American suburb, and pioneering innovations in house and neighborhood design. The period of significance extends from 1936, when the construction began, to 1952, when the period of Federal management ended and homes were sold to private owners. In contrast to the other two completed greenbelt towns, Greendale exhibits traditional planning principles and stylistic influences drawn from American history, as well as the preference of Milwaukee's working-class residents for single family dwellings with garages and private yards.

Greendale is located in Milwaukee County, Wisconsin, about eight miles southwest of the commercial center of the city of Milwaukee (Figure 2). As one of the three "greenbelt towns," named for the belt of parks and farmland that was to encircle each community, the site for the village center was carefully selected for its natural topography, which formed a natural bowl with gently sloping, wooded hills to the west and north and a free-flowing creek that carved its way from north to south before joining the Root River which wound its way among the fields and woodlands southwest of the city (Figure 3). Originally the U.S. government acquired 3,410 acres in 1936. In 1937, 534 acres along the Root River were transferred to the Milwaukee County Park Commission for the construction and recreational development of the Root River Parkway, which would connect the new town with nearby Whitnall Park and the other components of the metropolitan park and parkway system. In the late 1930s, these areas were improved through WPA-funded labor and the work of the Civilian Conservation Corps.

[3] The NHL district as proposed enlarges the National Register boundaries and includes additional land to the south and southeast that further research has shown reflects the plan, infrastructure, and community park land as laid out in the initial period of construction. It also includes the homes of the Clover Lane Addition of 1946, which was the first privately sold area within the original section. It includes additional contributing resources that date to the period of significance, 1936 to 1952, and several noncontributing resources built since 1952.

The extensive acreage acquired by the Federal government guaranteed long-term prospects for controlled suburban growth and continued agricultural land use. The original idea was to eventually build three decentralized town units. RA administrator Rexford Tugwell viewed such acreage as conducive to operation of agricultural cooperatives similar to those being organized in the agency's rural resettlement communities. Regional planning advocates, Jacob Crane and Frederic Delano, viewed the larger acreage as a land reserve for future development of neighborhood units with an abundance of area set aside for recreational and conservation purposes. In concept, when the demand for new housing arose, the government (or a cooperative entity) would already own the land, protecting it from rising real estate costs and speculative competition.[4]

Initially intended as the first of three town units, the historic development of Greendale was limited to the one town unit built between 1936 and 1938. Due to cut-backs in funding within the first year, the original plans for the construction of 750 housing units were scaled back to the 572 that make up most of the historic housing in the village today. Some additional homes were built after World War II in the unfinished sections of Peets's plan. In keeping with Ebenezer Howard's garden city concept, the original village was surrounded by a greenbelt left in agricultural and park use. RA administrator Rex Tugwell envisioned the remainder of the land as a cooperative agricultural venture and in the years preceding World War II a dairy cooperative operated in the community. As with the other greenbelt towns, Greendale's agricultural land use became marginalized. Some land was transferred to local park authorities, and, by the mid-1950s, the remainder, through public sale, passed into the hands of private developers who in keeping with the times took a more aggressive approach to suburbanizing what in the thirties had been an exurban hinterland. Much of the subsequent development at Greendale is believed by many to have followed a course of development compatible with the original concepts of topographic planning, most likely benefitting from the continued involvement of town planner Elbert Peets.

The historic village of Greendale lies south of West Grange Ave. and west of Loomis Road (STH 36), two multi-lane, divided roadways that carry high volumes of traffic and are part of the system of major arterials that serve metropolitan Milwaukee. North of the historic district, across West Grange Ave., lies the Southridge Mall, a large, enclosed shopping center erected in 1968-70, and several residential subdivisions of a similar age. South of the district, across Southway, is the local high school, a sprawling facility with expansive playing fields built and expanded in the mid to late twentieth century to accommodate the town's growing student population. To the west, beyond the woodland park and the original school grounds and to the east of the historic village are residential neighborhoods built after 1952, when the Federal government sold much of the undeveloped, agricultural greenbelt to the Milwaukee Community Development Corporation. In many areas, the trees that once marked the edges of the built-out area of the New Deal-era plan have grown into thick plantations that form a naturalistic boundary between the historic district and the surrounding newer development.

Discernible in the design and brick materials of all the major civic and commercial buildings, the influence of the Colonial Revival style provides the village center with a distinct, architectural unity and civic identity, which are reinforced by the strong axial presence of Broad St. and its cross-axis along Schoolway. These buildings are the work of architect Walter G. Thomas. Most prominent is the centrally located village hall (Photograph 4), which is the focal point of the main axis and features a five-part, symmetrical plan and is finished with red brick walls, classically inspired entrances, a central tower, large multi-paned windows, and distinct brick quoining. In contrast, most of the residential buildings exhibit a stripped-down, functional, modernistic variant of the Colonial Revival style in which architectural features, such as hipped roofs, brick pilasters and quoins, wide brick chimneys, and enclosed vestibules are predominant. Others reflect a

[4] Other than the development of Root River Parkway by the Milwaukee County Park Commission, little attention was given to the actual planning and graphic representation of the area beyond what is now the historic core of Greendale until the late 1940s. With a period of significance from 1936 to 1952, the proposed NHL is limited to the historic village that took form in the 1930s and does not include the larger land reserve which was developed with residential subdivisions (for varying income groups) in the 1950s and 1960s.

simplification of the English Cottage Style through the use of gabled roofs, the placement of chimneys on the street-side elevations, and window configuration. The Greendale houses were designed by architect Harry H. Bentley. Although all the exterior walls were constructed with inexpensive, concrete block masonry covered by a thin layer of stucco, a fair degree of variation was built into the exterior house designs from street to street and, in some cases, from house to house within a cluster or court. A wide variety of dwelling types was achieved by varying the number and type of interconnected units, experimenting with different roof types, adding porches and vestibules, incorporating garages into the housing design, and adding modest architectural details such as brick chimneys, corner quoins, and three-part windows.

With an emphasis on safety, measures were taken to ensure fire safety, including using non-combustible materials in building construction (concrete foundation, cinder block walls, tile roofing), restricting the buildings to two stories in height, and installing a water system with fire hydrants and ample pressure.[5]

The Greendale NHL district is roughly bounded by West Grange Ave. on the north, Southway on the south, and the limits of the layout of the streets and development of blocks dating from the period of significance on the east and west (see Sketch Map). The boundaries of the NHL district encompass nearly 200 acres and represent the historic core of the incorporated Village of Greendale as envisioned by the town's planners and developed as a model community during the New Deal era.

The 389 contributing resources of the Greendale National Historic Landmark include one contributing site that represents the overall landscape of the historic village with its roads, natural features, parks, and yards and the following: three village governmental buildings, a flagpole sculpture, the original tavern and post office building; all of the Federally-built houses and housing blocks; and the houses in the Clover Lane Addition that retain integrity to the period of significance.[6] The noncontributing resources include 39 buildings (two churches, nine commercial buildings, a modern post office, two schools, and 25 residential buildings), and five structures (three vehicular bridges, a pedestrian bridge, and a park gazebo). Most of the original residential units were built with garages that were either physically connected to the associated dwelling or built as free-standing, detached structures. Although due to their small size they are not separately counted, they are considered important elements of each house and yard ensemble and contribute to the overall village plan and historic setting.

The Village Plan

The site of the original village lies southwest of the intersection of West Grange Ave. and Loomis Road and east of South 76th St. (identified as Center Road on the 1936 regional map). In 1936 these roads were considered principal transportation routes. The proposed village site offered the potential for convenient automobile access to the region's major areas of employment at the same time it provided the topographic features conducive for creating a quiet and healthy, secluded village setting, where children would be safe from the fast-moving traffic generated by the peripheral roads. The topography of the site was mostly rolling, rising toward the north and west and leveling out on the east and south. The natural topography guided much of the land use distribution, with single-family and twin residences concentrated in hilly areas and the administrative, commercial, and institutional buildings and rows of attached houses set on flatter land. The principal green space and the internal circulation paths follow Dale Creek, which flows north to south through the historic village. The presence of the creek influenced the development of the plan, with the areas immediately adjacent to the creek left as open green space with scattered groves of trees. Early photographs indicate that the creek could experience heavy

[5] Crane, "Safety Town," *Public Safety* 11 (August 1937), pp. 28-29.

[6] While the original National Register nomination counted each individual living unit as one contributing building, the current resource number is the result of counting each attached or semi-detached group of housing units, regardless of its size or number of units, as a single building.

flows during the spring thaw and possibly after significant rains. Known today as Dale Creek Park, this area is threaded with paths and play areas. The creek extends beyond the boundaries of the historic district and joins the Root River near the beginning of the Depression-era Root River Parkway. The parkway forms a wide arc following the river west and north to connect Greendale with Whitnall Park and the Boerner Arboretum on the west. The plan of the original section of Greendale with its land use distribution and various features—vehicular circulation system, public parks and private yards, pedestrian circulation system, street trees, gardens, and other landscape improvements—is counted as one contributing site.

The collaboration of two prominent planners provided the project with a wealth of talent, training, and knowledge. Their combined contributions account for the outstanding character of Greendale's plan and the panoply of unique and distinctive qualities that remain highly visible in the village today. Trained as a landscape architect, Elbert Peets brought a wealth of experience and knowledge in town planning, civic improvements, and subdivision design. Jacob S. Crane, Jr., a well-respected Chicago planner was concerned with the village's transportation network and the broader regional issues of how the new town would relate to the central city, nearby places of employment, and the development of metropolitan parks and parkways.

The Greendale plan is distinctive for its integration of formal and informal elements of design. Peets and Crane settled on a plan inspired by American Colonial town planning, especially the Baroque-influenced town plan of Williamsburg, Virginia, which was organized along a formal axis and cross-axes which terminated in stately public buildings. Despite the formal structure, the Williamsburg plan allowed for an informal, small-scale and spacious development of intervening buildings that functioned as homes, taverns, shops, workshops, farm clusters, pastures, and gardens.[7] The Greendale plan similarly integrated informal elements within the overall formal structure created by a central axis and several cross axes (Figure 4). At Greendale, Broad St., which ran north to south, was designed to serve as the principal formal, axial corridor. A stately five-part Colonial Revival building, the Greendale Village Hall was situated at the street's north terminus on Northway, forming the focal point of the central axis and anchoring the commercial and civic center of the historic village (Figure 5). The principal cross-axis was created by Schoolway, which ran east to west, and the sweeping lawn of a formal mall (featuring a memorial flagpole and sculpture) that ran parallel to Schoolway and terminated at the former Greendale Community Building and School (now Greendale Middle School). Today the school crowns a rise at the mall's west end and is framed by the native woodland of the School Woods, which marked the western edge of the historic village. Located near the western end of Schoolway, the now-vacant Police and Fire Station and Public Works Buildings (with a distinctive hose tower) face the mall. Northway, Crocus Ct., Conifer Lane, Catalpa St. and Southway intersected Broad St. at right angles and were designed as additional cross-axes leading to residential cul-de-sacs and lanes. Beyond this central organizing structure, many residential streets were laid out to fit gently into the natural topography and provide access to the internal greenway that followed Dale Creek north to south through the east side of the village or the School Woods on the west side of the village.

The layout of the original village is composed of a centrally located commercial and administrative village center framed on all sides by residential areas and bordered with parks. The vehicular and pedestrian circulation systems are separate. The roadways are hierarchical and consist of broad collector streets and narrow residential lanes and courts, many in the form of cul-de-sacs. Three collector streets—Broad St., Northway, and Southway—give formal structure to the town plan, connect one end of the community with the other, and connect the community with the main outlying county and state arterials. Residential lanes and courts of varying sizes and arrangements are located off the collector streets and provide a variety of settings for single

[7] The restoration begun in the late 1920s at Williamsburg by architects Perry, Hepburn & Shaw and landscape architect Arthur S. Shurcliff, was well-publicized and highly respected by the design professions. It strengthened and gave new emphasis to the Colonial Revival movement in America, which had begun earlier in the form of regional efforts to recognize and replicate aspects of American colonial culture.

and multiple-unit dwellings. The collector streets were originally planted with evenly spaced trees, including elm and ash. Unfortunately, both species have suffered from decimating blights and many have been removed. As trees die and are removed, the current forestry management plan calls for replacement with a wider variety of species.

The new town was built with a full complement of public utilities, including water mains, sewers, a heating plant, a water softening facility, waste treatment plant, and a hilltop water tower (located outside the district boundary). In keeping with the highest, state-of-the-art practices and the recommendations of the 1931 President's Conference on Home Building and Home Ownership, power and telephone lines were buried underground throughout the development, eliminating the visual clutter of overhead wires and utility poles. All streets were paved and equipped with street lamps and fire hydrants. Streets were designed with a sidewalk along one or both sides and curbs with special cuts for the driveways and parking areas. Public water fountains were placed along Broad St. and in Central Park.

The original commercial center built in the 1930s consisted of a handful of small-scale commercial buildings built on the west side of Broad St. Fronting on a wide off-street parking area and backing to Parking St., these buildings consisted of a brick Colonial Revival tavern on the corner opposite the Village Hall (Photograph 1), a two-story, brick commercial building housing the post office, and a one-story store block housing the village theater and several small shops. To the west, these buildings faced Parking St. and, in several cases, provided additional storefronts and rear entrances. A bus shelter and service station on Parking St. completed the original commercial center. Additional commercial buildings were built on the east side and further south on Broad St. from the late 1950s to the 1970s. The commercial center is the most altered area of the original village. The original and later store blocks have undergone many changes, the most recent being the ca. 1995 downtown revitalization that introduced new façades with brick corner towers and decorative hip roofs and gabled fascia. Only the tavern and post office retain their historic character. The marginal or lost integrity of the other historic commercial buildings contrasts with the outstanding integrity of the neighboring institutional buildings and the ongoing efforts to preserve them. Overall the village center retains the modest scale, village-like character, and functionality intended in the original plan, and the highly important axial relationship of Broad St. and Schoolway.

Lined today with evenly spaced shade trees as in the original plan, Broad St. was laid out in the form of a wide boulevard along a natural depression running north and south near the center of the village tract. Originally the land making up Dale Creek Park was open parkland that emanated north and south from a centrally located common, called Central Park, which extended from the corner opposite the Village Hall south along the east side of Broad St. to Crocus Ct. From Crocus Ct. south, the park land narrowed becoming a wide grassy border that extended the remaining length of the axial corridor. Today, the portion of the park between Schoolway and Crocus Ct. remains intact and functions as a centrally-located public park and, having a recently constructed gazebo, is commonly used for outdoor concerts and activities. The west side of Broad St. continues to be graced with the original wide tree-lined border that backs to the residential yards and gardens of the houses on Dale Lane. The central axis passes through a small park south of Catalpa St. before it terminates at Southway. By the late 1940s, interest in expanding the village's commercial corridor began to surface, and, in the following decade several plans were commissioned to examine how new development could be accommodated. By 1960, several one-story linear shopping blocks had been built on the western edge of Central Park across from the Village Hall. In the next decade and a half, additional low-rise commercial blocks filled the block between Schoolway and Crocus Ct. on the west side of Broad St. and Crocus Ct. and Catalpa St. on the east side. Despite the loss of what Peets conceived as a wide tree-lined grassy mall running nearly the full length of Broad St., the prominence and stately verdure of the tree-lined boulevard remains intact although the open space that once bordered it has become fragmented.

The evolution of Broad St. points out the importance of the original planting plan in establishing a garden-city ambiance in the community. Primarily the design of Elbert Peets, who was trained in landscape architecture and had a reputation for horticultural genius, the planting plans for Greendale contributed to the overall attractiveness of the village and provided an important unifying element that brought disparate elements—residences of different types, public and commercial buildings, streets and public utilities—into a cohesive whole where built-out areas blended seamlessly with nearby parks and a pervasive sense of verdure and nature defined community character. Such a unified planting program was a distinctive element of the English garden cities, prized for the seasonal displays of flowering trees, and the American garden cities, Mariemont and Radburn, where landscape architects were specially commissioned to develop and supervise thoughtful and attractive plantings, many using species native to the region.

An essential part of Peets's Garden City design was the selection and installation of trees, shrubs, and plant materials. He proposed the larger planting plan for the community—one that called for a variety of planting venues. These included unified plantings of street trees, flowering borders, fences with perennials, plantings, hedges, climbing vines, specimen trees, rock gardens, and unified copses of trees and shrubs. In addition to new plantings, a number of the existing trees that had provided shade on the open pastures of the original farms were retained and protected in the new planting plan. Much of the natural oak and maple woodland on the east-facing hillside was designated as the School Woods and left undisturbed apart from several pedestrian paths. Similarly, the natural growth of trees and shrubs along Dale Creek was encouraged.

Despite the attention given native species in the design of Radburn's parks and residential courts and the recommendations of the 1931 President's conference, Peets did not limit his palette to the native species of the Midwest. When Jens Jensen, the Chicago landscape architect nationally recognized for promoting the exclusive use of native plants and introducing what became known as "the prairie spirit" in landscape gardening, criticized Peets's plan for its use of nonnative species, Peets responded that he proposed the use of plants that needed little skilled care and that were familiar to the residents.[8] Familiarity, in Peets's terms meant plants, shrubs, and trees that appealed to the average person and were likely to evoke the image of small town America, drawing from a long history of use and collective memory in the Midwest. Regardless of whether such species were technically endemic to the Great Lakes region, their use was justified on the basis that such old favorites were culturally appropriate, had popular appeal, and responded favorably to the growing conditions of the upper Midwest.

Private yards and gardens were an essential component of the Greendale plan and were a feature of all house types. Each yard was divided into separate areas, including a service court (often with a garage) and a small entry garden or border on the street side of the house, and a lawn for family recreation (and hanging laundry) and a large flower and vegetable garden on the garden side. Many yards faced public parks. Peets called for vines, high shrubs and small trees near the garages and hedges and trellises with vines at the front of the house (Figure 6). Honeysuckle shrubs were prominent, as were privet, currant, and high bush cranberry. Residents removed many of these over the years and replaced the original bushes with a broader variety of ornamental plantings. Today, mature trees, low hedges, shrubs, and fencing placed along lot lines define the yards and separate them from each other and from adjacent parkland. Today most yards contain typical backyard plantings and play equipment. Many homeowners have added porches, patios, or additional rooms to the rear of their houses; few of these changes are of a size or scale to detract from the historic character of the district.

In adapting the neighborhood unit formula, the Greendale plan integrated numerous variations for housing courts, cul-de-sacs, and residential blocks, and introduced innovations in small house design and housing

[8] Arnold R. Alanen, "Elbert Peets: History as Precedent in Midwestern Landscape Design," in *Midwestern Landscape Architecture,* William H. Tishler, ed. (Urbana and Chicago: University of Illinois Press, and Amherst, MA: Library of American Landscape History, 2000), pp. 206-207.

groups, the layout of the suburban yard, and the arrangement of residential streets. All of the residences lie within one-half mile of the school and the village center. Most of the village homes are laid out along short courts that provide residents access to their homes, a parking spur, and garage, and end in a cul-de-sac. While they differ in length and in the composition of housing types, many courts are arranged with near symmetrical distribution of housing types (Figures 7 & 9). Single family homes mirror each other across the street, as do duplexes called "twins" and larger multiple-unit row dwellings. On the courts off Northway east of Broad St., the larger multiple-unit rows are concentrated at the entrance to the courts close to Northway. Northwest of Broad and Northway, multiple-unit row dwellings have been placed at the end of and perpendicular to the courts, to impart a sense of orderly enclosure. Very few streets or courts are limited to a single housing type, the exceptions being the concentrations of multiple-unit row dwellings along Dendron and Dale lanes (Photograph 14) in the flatter, southwest section and the lines of uniform, detached houses that flank the long, curvilinear lanes of the hillside sections. In the flatter areas, there is also greater variety in the size of dwellings facing each other on a single street, likely the result of a conscious effort to alleviate the monotony and density of scale inherent in the grouping of large multi-family buildings. With the exception of a number of small, one-story twins, few houses front Northway. Schoolway and Currant Lane both have a variety of house types. The residential lanes are very narrow, barely permitting two cars to pass one another. Most run north-south, giving the housing the best possible orientation to benefit from sunlight and prevailing breezes. Some of the residential lanes are quite steep, and many end in cul-de-sacs. The residential streetscapes throughout Greendale retain an amazing degree of historic integrity with virtually no infill, distracting additions or alterations, or evidence of road widening (Photographs 2, 8, 10, & 12). All of the houses built between 1936 and 1938 remain intact with relatively little alteration.

From Public Parks to Private Yards

Spaciousness, according to the recommendations of the 1931 President's conference, was one of the most important features of the ideal community of the future. Public parks, tree-lined streets, grassy borders, off-street pedestrian paths, and private yards combined to provide Greendale with the sense of spaciousness. Respect for the region's natural topography and a coordinated program of planting enhanced the community character identifying it as an attractive, healthy, and verdant community that drew from the English Garden City movement as well as American developments in naturalistic landscape architecture and town planning. Many trees and shrubs were selected and planted throughout the community for unity and harmony, giving the community a cohesive character. Diverse species and distinctive patterns of design differentiated the neighborhood streets from the axial corridor of the village center, the centrally located public park from the wooded hillsides, and the private yards from the commonly used informal open spaces. In some places existing trees were selectively retained, and in others plantings were deliberate and followed popular trends in landscape design. The quality of spaciousness and the unified harmony of the natural landscape and the built environment continue to define the Village of Greendale today.

Topography played an essential role in the organization of Greendale's parks and pedestrian pathways. A primary natural feature, Dale Creek flows southward and eastward through the original section east of Broad St., joining the Root River outside the historic district. The creek and its wooded banks form the spine of what is today called Dale Creek Park, a linear greenway that winds through the eastern part of the original section. Located on land subject to flooding or too steep for simple, low-cost construction, Dale Creek Park was a suitable area for the reservation of park land in keeping with the American nineteenth-century practices of the Olmsted firm and others. Peets and planner, Werner Hegemann, had used a similar device in their 1916 plan of Washington Highlands (NR), a Milwaukee suburb. Originally the park had a much more open feeling than it does today with its abundance of mature trees and shrubs. In the 1936 Peets plan, the park was divided into several sections with the central section adjoining Broad St. identified as Central Park and the sections north and south identified as Valley Park.

Dale Creek enters the historic core of the village at West Grange Ave. between Avena Ct. and Basswood St. and flows southward through the narrow corridor of green space that borders the residential lots on Avena Ct., Blossom Ct., Angle Lane, Basswood St., and Municipal Square. South of Northway, it passes between the recently remodeled shopping center on the east side of Broad St. and the yards on the west side of Badger Ct. Here the surrounding green space widens to form a multi-pronged swathe of park land, with one section extending eastward to border the clusters of homes on the north side of Schoolway and Cardinal Ct. and another extending southward across Schoolway. South of Schoolway the park splits again, with one section extending west to Broad Street; centrally located this section now serves as the village common and is the only remaining section of what was formerly Central Park. Another section of the park extends southeast along both sides of Dale Creek and is interspersed with spacious clearings, play grounds, gentle slopes, and copses of mature trees that provide a shaded canopy. Here the park widens considerably and borders on the yards along Schoolway, Crocus Ct., Carnation Ct., and Clover Ct. The creek crosses under Clover Lane midway between Schoolway and Catalpa St., and the park, now thickly wooded, again divides southward along the stream to Southway and eastward to the district boundary on Loomis Ave. Most of land between Catalpa St. and Southway has been set aside for park use and forms the southern edge of the NHL district. Dale Creek joins Root River south of the NHL district near the eastern terminus of the Root River Parkway (which runs west and south of Greendale, and formed a part of the original greenbelt).

Peets's 1938 plan shows the retention of the natural woodland of oaks and maples on the east-facing slope on the west side of the village (Figures 3 & 4). Named the "School Woods," the approximately 30-acre park is laced with pedestrian pathways connecting the school and playing fields with neighboring streets (Photograph 6). Today, as originally planned, it provides a dense naturalistic border and strong sense of enclosure, shielding the village from later development, visual intrusions, and the noise and activity of nearby arterial roadways. Through its scale, location, and informality, the landscape is reminiscent of the woodlots and town forest reserves of early New England towns. It also reflects nineteenth century practices of park and estate design that called for the development of border plantations to screen external influences. Enjoyed and managed as a naturalistic park since the 1930s, the landscape remains in a naturally wooded condition except for the area directly behind the school where playing fields have been expanded and a new elementary school built. Newspapers from the 1940s reported that local boy scouts cleared dead trees from the school woods. Current maintenance is limited to pruning and the removal of invasive species, such as buckthorn.[9]

East of the school, the grounds form a gently sloping greensward that merges with the Mall, a formal green space that, parallel to Schoolway, sweeps toward Broad St., reinforcing the distinctive cross-axis of the town plan and providing a setting for the flagpole sculpture designed by New Deal artist Alonzo Hauser (Photograph 3). Although the footprint of the school has expanded considerably since the 1950s, with numerous brick additions, the spatial relationship and visual character of the school's open lawns and grassy mall remain intact and signify the prominence that the school/community building held in the town's planning and its history as a neighborhood-based community. West of the school/community building the athletic fields and playgrounds have expanded somewhat into the School Woods. Despite these changes and the construction of a new elementary school (Canterbury Grade School), much of the historic woodland, pedestrian paths, and border plantations remain and retain the woodland setting and sense of enclosure intended by the plans of the 1930s.

The intent of the town planners was to enable residents wherever they lived in the village safe and convenient access to a neighborhood park without crossing a collector street. These areas were conveniently accessible to residents living in the central and southern portions of the village or those willing to cross Northway, a busy thoroughfare. Because the streets in the northwest quadrant were particularly isolated the designers reserved a small clearing in a low-lying area between Apple Ct. and Apricot Ct. for use as a small neighborhood park,

[9] Telephone conversation, Daina Penkiunas with Bob Ziarek, Village Forester, Greendale, 19 July 2011.

Pioneer Park. Nestled-in among neighboring cul-de-sacs, the park today is surrounded by trees and shrubs and equipped with benches and flower gardens. Paved pedestrian pathways thread their way through the community, weaving among the residential nodes and connecting the residential groups with parks, schools, and the village center. A long linear pedestrian path extending from Apple Ct. to Arrowwood St. connects the park with all of the streets in the northwestern corner of the village. A small park, known as Grange Park, was originally located at the north end of Arrowwood St. where it meets West Grange Ave.; when the model home opened in Spring of 1937, a wooden boardwalk led from the park (which may also have been used for parking) to Acorn Ct. where the model home was located (Figure 16). This park was subdivided into three house lots in the mid-1950s.

Unlike the other greenbelt towns, Greendale's plan set aside considerable space for the development of private yards. Each residence, whether a single-family house or a row house unit, was designed with a private yard, having an average size of 5000 square feet. For economy of construction, all of the residential buildings were built close to the street, creating a small border on the street side for a lawn, small garden, hedge, or single tree or shrub and leaving a spacious yard away from the street.

The community's emphasis on the private yard and home gardening shifted the care of the space from the village to the individual tenant and allowed the residents a private space to hang their laundry, and to plant flower and vegetable gardens. Some residents also planted fruit trees. Residents were responsible for cutting the lawn and caring for the yard, and were instructed to plant their garden according "to a plan which has been prepared for each of the yards."[10] These plans specified certain plants, selected by the design team for beautification, screening, and ease of care. Residents were further cautioned that only flowers and small vegetables could be grown in the yard. Larger produce, such as corn, could only be grown at the allotment gardens, which were located on the north side of West Grange Ave.[11] This interest in flowers and gardening led to the village calling itself "The Garden City" or "The Garden Community" by the 1940s.[12] Widespread interest in vegetable gardening grew with the onset of World War II, with residents planting victory gardens in designated plots and expanding the size of the vegetable gardens in their yards.

The original plan took into account the need for play areas. The play area for older children was located at the community center and school, while areas for younger children were located near the residential clusters. The school property still has its associated playgrounds, and playground equipment for younger children is located throughout the community. The centrally located tennis courts and horseshoe pits originally located on the west side of Broad St. between Schoolway and Crocus Ct. were replaced in the 1960s by a modern post office and shopping arcade. The original allotment gardens on the north side of West Grange Ave. (outside the district boundaries) are no longer intact. The land between Catalpa St. and Southway was left undeveloped and continues to serve as a park and recreational area. Large athletic fields were located at the southern end of the district where the high school is now located. As is the case today, golf and swimming were available at nearby Whitnall Park, part of the Milwaukee County park system, which was reached by the Root River Parkway which began southeast of the village and extended west. In the winter, an outdoor rink in the county park was flooded for ice skating.[13]

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[10] U.S. Department of Agriculture, Farm Security Administration, *Helpful Suggestions for Greendale Residents*, (Washington, D.C.: U.S. Government Printing Office, 1938), p. 10.

[11] Ibid.; James Drought, "Landscaping Greendale," *Greendale Review*, 25 January 1940.

[12] A log and board sign erected in 1944 at Loomis and Grange read "Greendale—The Garden Community."

[13] In the 1930s through the work of the Civilian Conservation Corps (CCC) and labor funded by the Works Progress Administration (WPA), the Milwaukee Park and Parkway System was improved and expanded. This work included improvements to Whitnall Park, an existing Milwaukee public park; the construction of the Root River Parkway; and the development of the Boerner Arboretum. The coordination of resettlement housing projects and recreational development was an important component of New Deal national resource planning and reflected regional planning principles.

The Pedestrian Circulation System

Highly distinctive as a characteristic feature of the New Deal greenbelt towns is the network of sidewalks and pedestrian pathways that link residential streets with nearby parks, the village center, and community facilities. For the most part, this network was designed to function independently from the road system, link one residential street with the next (Figure 7), and provide passage to and through Dale Creek Park and the School Woods. Greendale's pedestrian circulation system consists of paved pathways that run from the ends of the cul-de-sacs, behind and between the yards, and pass through wooded parkland, providing every home with a pleasant, traffic-free walk to playgrounds, schools and the village center (Photograph 6). Pedestrian bridges have been built at several locations in the park to carry foot traffic across Dale Creek. Consisting of a board walkway with timber posts and rails, two of these are rustic in appearance and appear to be original to the 1930s plan.

This character-defining feature indicates the response of planners and designers of the 1930s in adapting the suburban ideal to the increasing presence and potential dangers of the automobile in American life. Introduced in 1928 by Clarence Stein and Henry Wright in their creation of a "town for the motor age" at Radburn, New Jersey, the idea of a community with two interdependent but separate systems of circulation—one for automobile traffic and the other for pedestrians—was compatible with Clarence Perry's Neighborhood Unit Plan and became an essential component in the planning of the greenbelt towns and their demonstration of an ideal for modern suburban life.

A plan published in Jacob Crane's 1938 article, "Safety Town," illustrated the designers' vision for a cohesive, interconnected system of pedestrian paths (Figure 8).[14] This system was designed 1) to provide an internal network of footpaths within each major residential area, and 2) to create an overall system that connected each residential area with Dale Creek Park, the School Woods, and the centrally located village center where the school, village hall, shopping district, public service buildings, and a public common were located. Much of the internal network of pedestrian paths leading to the village center, school, and parks remains intact and continues to be used by residents. The peripheral and connecting paths that extended into the open space east of the village during the period of significance were either never built or were lost after 1952 when the outlying land was subdivided and zoned for development. These changes had the greatest effect on the network of pedestrian paths that served the streets east of Basswood St. and the northeast corner of the village.

The original section of Greendale was laid out so that parks and playgrounds could be reached from the housing areas without crossing any streets, and the school and the village center were accessible from any home by crossing no more than one collector street. Although grade separations similar to those built at Radburn and Greenbelt were originally envisioned for Greendale, they proved costly to build and were dropped from the plans when a major budget reduction occurred early in the construction phase.[15] Instead all way stop signs were placed where major roads intersected and at the crossing of the two principal axes at Broad St. and Schoolway. Buildings were set back from the intersections to provide both drivers and pedestrians with expansive and unobstructed views.[16] Pedestrian paths were designed to follow Dale Creek as it wound its way through the village and drew residents from neighboring streets into and through the parks; today paths exist in the areas designated as park land and form a continuous north-to-southeast trail from West Grange Ave. to Clover Lane.

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[14] Jacob Crane, "Safety Town," *Public Safety* 11 (August 1937).

[15] According to Lewis Mumford the idea for this device came from Olmsted and Vaux's plan for Central Park where arched structures were constructed to carry carriage roads over pedestrian footpaths, Introduction, in *Toward New Towns,* p. 16. Radburn's grade separations were highly celebrated; although such structures were intended for all the greenbelt towns, the only ones built are at Greenbelt.

[16] Crane, "Safety Town," p. 29.

In addition to paved linear and curvilinear paths, the pedestrian circulation system included standard concrete sidewalks, which appeared along both sides of the collector streets, and, in the form of narrow walkways, on one side of many residential lanes. These, like the paved driveways, curbs, and garages on the residential streets were just being recognized as essential amenities for well-planned subdivisions.

In the description of the pedestrian circulation system below, the system is divided into three sections each bordered by two of the principal thoroughfares, West Grange Ave., Northway, Schoolway, and Southway. The northern section covers the network of interconnected paved paths north of Northway and identifies the paths that connect the north side courts and lanes with Pioneer Park; the central section covers the paths south of Northway that connect the cul-de-sacs south of Northway with the School Woods, Dale Creek Park, and Schoolway; and the southern section covers the sidewalks south of Crocus Ct. and paths leading through the southern section of Dale Creek Park.

At the northern end of the village between West Grange and Northway, a long rectilinear, paved pedestrian path runs parallel to West Grange Ave. (the northern boundary of the district) and extends east from Apple Ct. to Arrowwood St., passing through the northern sections of Apricot Ct., Arbutus Ct., and Azalea Ct. near the terminus of each cul-de-sac. Today, as in the period of significance, this path connects the neighborhood streets with Pioneer Park and each other. Along one side of each street, a paved sidewalk led to Northway. The single houses on West Grange Ave. backed to this pedestrian path, while the multiple-unit houses whose garden entrances and spacious yards faced the avenue had service entrances facing the end of each cul-de-sac. A paved path ran alongside the east/west side of Dale Creek and connected with paths from Angle Lane led east to the northern section of Dale Creek Park and south to the intersection at Northway and the village center. A series of short pedestrian paths connected each of the courts south of West Grange—Acorn Ct., Alba Ct., and Avena Ct.—with the sidewalks on Angle Lane. A path follows the east side of the northern section of Dale Creek Park. Originally, pedestrian paths led from the cul-de-sacs on Bluebird Ct., Butternut Ct., and Balsam Ct. to former park land on the east side of the village and to the teacherage that was originally located at a former farm south of West Grange Ave. and east of Blossom Ct. The park land was subdivided after the period of significance and the paths from these cul-de-sacs were eliminated. A narrow sidewalk extends downhill from West Grange to Northway along the east side of Arrowwood St. and the east side of Basswood St.

In the central section of the village between Northway and Crocus Ct., the main east–west pedestrian corridors were Northway, where sidewalks lined both sides of the street, and Schoolway, which formed the cross-axis on Broad St. and connected the paths through Dale Creek Park with the grassy mall leading to the school grounds. The mall was intentionally designed as a cross-axis to the major axis formed by Broad St. And as the main axis focused visually on and terminated at the Village Hall—symbolically representing the center of civic life—the mall drew special attention to the school (and former community building) as a vital and central element of the town plan and the center of community life. Not only did the mall provide a formal and dignified entrance to the school, but it also connected the commercial corridor with the school and public service buildings clustered to the west and continued the east-west flow of pedestrian traffic along Schoolway. The mall continues to provide an uninterrupted view of the school and, although the area closest to Broad St. has been paved for parking, the main design and spatial elements of the mall remain intact. A stairway flanked with hedges leads up from Broad St. to an attractive grassy terrace that is marked by a New Deal-era flagpole, sculpture, and bench. The terrace opens onto the broad greensward that merges with the school grounds. Despite the additions to the school and the diminution of the original greensward, the spatial relationship of the original building and pedestrian mall remain intact. It continues to provide a unifying element that visually and physically connects the east and west sides of the village.

On the west side of the central section, pedestrian paths connect the south cul-de-sacs of Apricot Ct., Arbutus Ct., and Azalea Ct. with the woodland path leading through the School Woods to the school and former

community center. On the east side of the village, similar paths connect Bramble Ct., Berry Ct., Beaver Ct., Badger Ct., and the north cul-de-sac of Cardinal Ct. with the eastern extension of Dale Creek Park and lead to Schoolway. North of Schoolway, paths lead north and east through Dale Creek Park. A series of paths originally extended east and curved northward through parkland on the eastern edge of the village connecting Schoolway and Northway; these paths were lost when the land was subdivided after 1952.

At the southern end of the village between Schoolway and Southway, paths lead through Dale Creek Park crossing Clover Lane and sidewalks connect the homes on Carnation Ct. and Cardinal Ct. with Schoolway and Clover Lane. Sidewalks along the residential lanes in the southern tier of the village carried most of the pedestrian traffic northbound to the school/community building and village center or southbound to the athletic fields. A paved sidewalk extends along the west side of Clover Lane. Pedestrian paths leading through the park in both directions (northwest and southeast) can be entered at the stream crossing and bridge. The pedestrian paths continue through the southern section of Dale Creek Park and end at Loomis Road. Conventional sidewalks provide pedestrian access along the grid of streets that make up the other neighborhood streets to the east and west of Broad St., including Dale, Dendron, Coneflower, Currant, and Conifer lanes. Athletic fields, pedestrian paths, and park land now occupy much of the open space on the south side of Catalpa St.

Vehicular Circulation System

The hierarchy of roads is a distinctive, character-defining feature of neighborhood unit planning. Developed in the 1920s at Mariemont and Radburn, it became a hallmark of the American Garden City movement, and was adopted as a key tenet of several New Deal community planning programs. This characteristic persisted when other elements of the movement lost favor and became one of the major influences on the design of postwar suburbs.[17] At Greendale, two main types of roads make up the vehicular circulation system: collector and residential (or service) streets. Two major subtypes make up the community's residential roads: the short court that ends in a cul-de-sac and the long, narrow lane that, either curvilinear or rectilinear in form connects with two or more streets within the village. The curvilinear sweep of groups of single-family homes (Figure 10 & Photograph 2) on Arrowwood St., Basswood St., and the northern section of Clover Lane contrasts markedly with the symmetrical arrangement of the more commonplace courts and cul-de-sacs (Figure 9 & Photograph 14). All of Greendale's streets were built to a width appropriate for its particular function, and had utilities placed underground. The streets were paved, designed with curbs and cuts for driveways, and equipped with street signs, fire hydrants, electric street lamps, and, in public areas, water fountains (Figures 7 & 11). Many had sidewalks on one or both sides and connected with pedestrian paths.

Whether they are short Radburn-inspired courts that provide privacy and order to a small grouping of homes, or long, gently curving or straight lanes with houses laid out in a pleasing symmetrical or rhythmical progression, the streets of Greendale were designed to the highest standards of suburban design. Each road was laid out in keeping with the best practices of the day. Because Northway extends northwest on a diagonal west of Angle St., each court in this section is bent at a slight angle as it approaches Northway to ensure that it meets the

[17] This influence persisted primarily due to its continuing endorsement by the FHA from 1935 onward and the Urban Land Institute through its *Community Builder's Handbook*, first published in 1947. Renewed interest in Olmsted and Vaux's 1968 Plan for the Village of Riverside in the early 1930s and advanced methods of subdivision proposed by Henry V. Hubbard and Arthur Shurcliff merged with Garden City ideas to define the modern American suburb. The greenbelt towns, particularly Greendale and Greenhills, provided early publicly sponsored demonstrations of the application of this concept to large-scale neighborhood development at a time when private building initiatives were flagging. Long curvilinear streets and cul-de-sacs became the primary design elements of this concept. See David Ames and Linda Flint McClelland, *Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places* (Washington, D.C.: U.S. Department of the Interior, National Park Service, 2002), pp. 48-51.

collector street at a right angle; by the 1920s this was an established convention for subdivision design (Photograph 12).

The collector streets carry traffic through the community and connect with the major roadways at West Grange Ave. and Loomis Ave. (STH 36). Originally the community was entered from the north and south off Loomis Ave. Street development in the postwar period allowed further entry to the village from Center Ave on the west through an extension to Southway. In the original section, the collector streets are Northway, Broad St., and Southway. Northway, an east to west curvilinear street, connects the residential streets in the northern part of the original section and begins and ends at two points on West Grange Ave. Broad St. is a north to south rectilinear street which formed the central defining axis of the historic village from Northway to Southway. Southway marks the southern terminus of Broad St. and forms the southern edge of the original village and leads on the east to Loomis Ave. The design of four-way intersections known to cause traffic hazards in urban settings was avoided in favor of "T" intersections, the most prominent one being the intersection of Broad St. and Northway where the Village Hall forms the terminus of the central axis. The exception is Schoolway which functions as a cross-axis. Concrete bridges with walls faced with stone carry Northway, Schoolway, and Clover Lane over Dale Creek; these small non-descript bridges were recently refurbished and are classified as noncontributing due to their recent date. Parking has always been an integral and commendable feature of the village's vehicular circulation system with service lanes and parking placed in front of the commercial buildings (Photograph 1), behind the Village Hall, and in the lot on Parking Street (Photograph 3) at the rear of the 5600 block of Broad St.

Most streets are named for plants or animals. The residential lanes in the northwest section begin with A (such as Apple and Azalea), those in the northeast section start with B (Bluebird, Beaver, and so on), those in the southeast begin with C (such as Clover and Carnation), and those in the southwest section start with D (Dendron, Dale and so on). In 1936, when the streets were initially named, there was no alphabetical pattern and tree names predominated, including Pear, Filbert, Elm, Sycamore, Oak, Maple, Dogwood, Elm, Pine, Locust, and Walnut.[18]

Inventory of Collector and Other Major Streets

Broad Street is a centrally located, tree-lined boulevard that extends north from Southway to Northway and forms the formal north-south axis that divides the town site into two unequal east and west sections. It forms an axial corridor that terminates at the Village Hall and is divided midway by Schoolway which forms a cross axis that runs east and west and runs parallel to pedestrian mall between Broad St. and the former school/community building. Originally it was designed to border Dale Creek Park on the east and provide a cluster of centrally located commercial and civic buildings (fire station, police station, public utility building) on the west. The only surviving portion of the park along Broad St. lies between Schoolway and Crocus Ct. The commercial corridor today extends southward and includes several sprawling non-historic commercial buildings and two twin dwellings (each being a two-unit, semi-detached house).

Northway is a tree-lined, collector road whose middle section runs east and west, forming a T-intersection with Broad St. at the Village Hall. Somewhat symmetrical, the two end sections of the road curve northward to connect with West Grange St. which forms the edge of the historic district. The grounds of the village hall are bordered on three sides by Municipal Square, a residential street that wraps around the village hall and connects to Northway on each side. Single- and multiple-family houses line the opposite side of the square and are arranged to face the village hall. West and north of Municipal Square, Angle St. extends north and turns east at a right angle to end in a cul-de-sac. The slightly curvilinear Arrowwood St. extends north to connect Northway

[18] "Greenbelt Towns," *Architectural Record* 80 (September 1936): 227.

and West Grange. The noncontributing Lutheran Church (built on land set aside for religious use) and an apartment complex (1963) consisting of three noncontributing, two-story buildings are located on the south side west of Broad St. West of Arrowwood, Northway turns in a northwest direction and extends on a diagonal to meet West Grange at the northern edge of the district. The northern section of Dale Creek Park and Basswood Street, a long curvilinear lane connecting Northway and West Grange lie immediately east of the village hall; further east, a cluster of three short "B" courts extend to the north while a cluster of four short "B" courts extend to the south. The streets in the historic core maintain integrity from the period of significance, although the original vehicular bridge across Dale Creek has been replaced.

Parking Street runs west of and parallel to Broad St. and connects Northway and Schoolway (Photograph 3). This street continues to provide a parking lot and street parking for the commercial area. At the south end, it leads to the former fire station and police station. Originally it also provided access to the gas and service station (now substantially remodeled as a commercial building), a bus shelter (no longer extant), and the rear entrances of the store blocks that faced Broad St.

West Grange Avenue is a major east-west arterial forming the northern boundary of the NHL district. Northway begins and ends on West Grange. Several cul-de-sacs (Acorn Ct., Alba Ct., and Avena Ct.) and two through streets (Arrowwood and Basswood Sts.) begin here and extend southward into the historic core of Greendale. The allotment gardens were originally located on the north side of West Grange.

Schoolway (West) forms a major cross-axis with Broad St. mid way between Northway and Southway. It serves a variety of functions. As an important east-west corridor it connects the residential courts and lanes on the east side of the village with the commercial corridor and public buildings that make up the village center. West of Broad St., it cuts across the commercial corridor, runs parallel to the pedestrian Mall leading to the school, and ends at the former school/community building, passing the police station and fire station, the public service building, and parking lots. Parking Street connects Schoolway and Northway, and runs along the rear of the store buildings and new library building (Photograph 3). East of Broad St. Schoolway crosses Dale Creek Park and becomes a residential street (see Inventory of Neighborhood Streets below).

Southway is an east-west collector street that originally extended east from Loomis Ave. and terminated at the south end of Broad St. The road was extended to the west after 1955. Forming the southern boundary of the historic district, it marks the southern edge of the community's historic development and recreational land. The Greendale Community Church (1953, with later additions) lies immediately north of Southway on the west side of Clover Lane. Open space to either side of Broad St. between Southway and Catalpa defines the entrance to the historic district. A non-historic high school with playing fields lies outside the district south of Southway.

Inventory of Neighborhood Streets

Neighborhood streets are primarily residential and are characterized by short courts that end in a cul-de-sac, or long curvilinear or straight streets that connect with nearby streets. All housing units have two stories unless described otherwise. The genius of the Greendale design lies in the ability of all the constituent parts to gracefully dovetail with each other. Multiple-family dwellings, or group housing, are identified as three-unit, four-unit, six-unit, or eight-unit rows. The streets and residential groups are laid out to follow the natural topography which gradually slopes southward toward the Root River, which lies outside the district. Dale Creek flows north to south in a slightly easterly direction and forms the principal drainage for the lands within the NHL district. Park land abuts Dale Creek and bridges carry pedestrian and automobile traffic across the creek on Northway, Schoolway, Clover Lane, and Southway. The residential streets are located in four general groups, each labeled alphabetically. The "A" streets to the northwest include streets west of Dale Creek on both sides of Northway and south of West Grange Ave. The "B" streets to the northeast include streets east of Dale

Creek on both sides of Northway and south of West Grange Ave. The "C" streets include streets east of Broad St. that, with the exception of Cardinal Ct., are south of Schoolway. The "D" streets in the southwest include streets west of Broad St. and south of Crocus Ct. The following list of residential streets begins in the center of the village, covers the "A" streets moving west along Northway and east along West Grange. It then follows the "B" streets as they extend east from the village center and adjoin Northway to the north and south, the "C" streets as they extend east from Broad St., and finally the "D" streets as they extend west from Broad St. All roads run north and south unless otherwise noted.

Northway is the primary east-west collector street for the residential courts and lanes on the north side of the village. On the west end, five twin dwellings, including several one-story twins, also known as "honeymooners" (Photograph 11), are laid out between the entrances to the "A" courts. A non-historic apartment complex is located just west of the village center on the south side.

Municipal Square is a tree-shaded, U-shaped court that borders the tree-shaded grounds around and the parking lot behind the Village Hall. The square has two entrances on Northway, one on each side of the village hall. Six twin dwellings (Photograph 7) and two single-family houses line the outer edge of the square. A thick hedge extends along the southern side and shields the parking lot and entrances from view.

Angle Lane is a long street that extends north of Northway (west of the village hall) and turns at a right angle to end in a cul-de-sac (Photograph 10). The yards on the east and south sides of the street back to the yards on Municipal Square. A pedestrian path connects the end of the cul-de-sac with the northern section of Dale Creek Park and the north-south paved trail that follows the west side of the creek. The street is predominantly made up of single-family dwellings and has one twin dwelling. One noncontributing single family house was built on an open lot in 1958.

Arrowwood Street is a long narrow, slightly curving street running south from West Grange Ave. to connect with Northway. It consists of twenty-two two-story, single-family houses configured to form a chain on each side of the road. Each house has a narrow setback from the street and a service court to one side that provided a driveway, detached garage, and side entrance. Gardens, hedges, shrubs, and trees enliven the streetscape. A narrow sidewalk runs along the east side of the street. On the west side a paved pedestrian path extends westward to connect with Azalea Ct., Arbutus Ct., Apricot Ct., and Apple Ct.

Azalea Court extends north and south of Northway in the form of two cul-de-sacs. It consists of three three-unit rows, four four-unit rows, and nine single-family homes (Photograph 5). The south cul-de-sac connects with the pedestrian path leading through the School Woods to the school/former community building, and the north cul-de-sac connects with a paved walkway that extends east and west and leads to nearby streets and Pioneer Park. A multiple-unit dwelling was placed at the north end perpendicular to the street, giving the cul-de-sac a sense of enclosure. On both the north and south, the court is the easternmost of three similarly designed courts. Rectilinear in form, each segment turns at a slight angle as it approaches Northway so that it meets the collector street at a right angle (Photograph 12). A paved sidewalk runs along the east side.

Arbutus Court extends north and south of Northway in the form of two cul-de-sacs. It consists of one three-unit row and twenty-two single family dwellings. The south cul-de-sac connects with the pedestrian path leading through the School Woods to the school/former community building, and the north cul-de-sac connects with a paved walkway that extends east and west and leads to nearby streets and Pioneer Park. The court lies between Azalea Ct. and Apricot Ct., and each segment turns at a slight angle as it approaches Northway so that it joins the collector street at a right angle.

Apricot Court extends north and south of Northway in the form of two cul-de-sacs. It consists of one three-unit row and twenty-two single-family dwellings. The southern cul-de-sac connects with the pedestrian path leading

through the School Woods to the school/former community building, and the northern cul-de-sac connects with a paved sidewalk that extends east and west and leads to nearby streets and Pioneer Park. On both the north and south, the court is the westernmost of three similarly designed courts.

Apple Court extends east from Northway near its intersection with West Grange Ave. It turns south a short distance before terminating in a cul-de-sac. It consists of one twin dwelling, two three-unit rows, and six single-family dwellings. A paved pedestrian path connects Apple Ct. with Pioneer Park and the cul-de-sacs (Apricot, Arbutus, and Azalea) and Arrowwood St. to the east.

Acorn Court is a short cul-de-sac that extends south from West Grange Ave. It is the westernmost in a cluster of three similarly designed courts and consists of six single-family houses. Number 5505 was the model home that opened in 1937 (Figure 16). A paved pedestrian path links the cul-de-sac with Angle Lane to the south.

Alba Court is a short cul-de-sac that extends south from West Grange Ave. It lies between Acorn Ct. and Avena Ct. in a cluster of similarly designed courts and consists of six single-family houses. A paved pedestrian path links the cul-de-sac with Angle St. to the south.

Avena Court is a short cul-de-sac that extends south from West Grange Ave. It is the easternmost of three similarly designed courts and has six single-family dwellings. A paved pedestrian path links the cul-de-sac with Angle St to the south.

Basswood St. is a long, curvilinear north-south road that begins at West Grange Ave. and slopes downward connecting with Northway east of Village Hall and Municipal Square. It consists of ten detached, two-story houses configured to form a chain on each side of the road (Figure 6 & Photograph 2). Each house has a narrow setback from the street, the gable end and chimney face the street, and a projecting one story vestibule serves as the entrance to the utility room. Each house has a service court to one side that provided a driveway, detached garage, and side entrance. A chimney mark now adorns many houses, and gardens, hedges, shrubs, and trees enliven the streetscape. A narrow sidewalk runs along the west side of the street. Six twin dwellings are located at the end near Northway. The houses on the west side of the street back to Dale Creek Park and the pedestrian path along the creek between West Grange Ave. and Northway.

Blossom Court is an east-west street that crosses Basswood St. just south of West Grange Ave. and ends in two cul-de-sacs. The west cul-de-sac has two single-family houses and a grouping of three twin dwellings, and the east one has five single-family houses.

Balsam Court is a short cul-de-sac extending north from Northway on the east side of the village. It has one twin dwelling, two three-unit rows, two six-unit rows, and four single family homes. It is the westernmost of three parallel and similarly designed courts.

Butternut Court is a short cul-de-sac extending north from Northway on the east side of the village. It lies between Bluebird Ct. and Balsalm Ct. in a cluster of three parallel and similarly designed courts and has one three-unit row, two six-unit rows (Photograph 8), and two single-family houses.

Bluebird Court is a short cul-de-sac extending north from Northway on the east side of the village. It is the easternmost of three parallel and similarly designed courts and has two twin dwellings and four single-family houses.

Bramble Court is a short cul-de-sac extending south from Northway on the east side of the village. It is the westernmost of four parallel and similarly designed courts. It consists of two six-unit row dwellings that face

each other. The housing units on the west side back to Dale Creek Park, and a paved pedestrian path leads from the end of the cul-de-sac to the park and Schoolway.

Berry Court is a short cul-de-sac extending south from Northway on the east side of the village. It lies between Bramble Ct. and Beaver Ct. in a cluster of four parallel and similarly designed courts. It consists of two six-unit rows and ten single-family houses. A paved pedestrian path at the end of the cul-de-sac leads to Dale Creek Park and Schoolway.

Beaver Court is a short cul-de-sac extending south from Northway on the east side of the village. It lies between Berry Ct. and Badger Ct. in a cluster of four parallel and similarly designed courts. Similar to Badger Ct., it has two facing six-unit rows at the end near Northway and twelve single-family houses. A paved pedestrian path at the end of the cul-de-sac leads to Dale Creek Park and Schoolway.

Badger Court is a short cul-de-sac extending south from Northway on the east side of the village. It is the easternmost of four parallel and similarly designed courts. Similar to Berry Ct. and Beaver Ct., it has two six-unit rows and ten single-family homes. A paved pedestrian path at the end of the cul-de-sac leads to Dale Creek Park and Schoolway.

Schoolway (East) is a major east-west street that leads to the existing middle school and forms a cross-axis with Broad St. On the east side of the village, it crosses Dale Creek Park and becomes a residential street containing two twin dwellings and seventeen single-family houses. Carnation Ct. extends south from Schoolway to end in a short cul-de-sac, Clover Lane extends to the south and connects with Catalpa St. and Southway, and, at the eastern edge of the district, Cardinal Ct. extends north and south and ends in cul-de-sacs. Originally, Schoolway ended at Cardinal Ct. marking the eastern edge of the built-out portion of the village; today it connects with Churchway, a roadway built after the period of significance when the open space to the east was subdivided and developed. Schoolway has sidewalks on either side and connects with sidewalks and pedestrian paths from the park and neighboring streets. The original vehicular bridge that crossed Dale Creek is no longer extant and has been replaced with a nondescript bridge built at road grade with low stone-faced rails.

Catalpa St. is a curvilinear street that runs east and west, crossing Broad St. at the southern end of the historic village. It defines the southern extent of the village's historic residential development and borders the open space and recreational grounds that formed the southern end of the village plan. Several single-family houses were built in the 1940s and 1950s after parcels on the eastern end of this street were offered for individual sale in 1946.

Crocus Court extends east and west, crossing Broad St. south of Dale Creek Park and the modern post office. East of Broad Street, it forms the southern boundary of the park, and contains six single-family houses, and ends in a cul-de-sac. By the end of the 1930s, Crocus Ct. extended only as far as the School Woods west of Broad St.; the boundary of the district is drawn here. Today, it extends further west and south and contains a cluster of apartment buildings (ca. 1960). Dale Lane and Currant Lane extend south from Crocus Ct.

Cardinal Court extends north and south of Schoolway to form two cul-de-sacs. This street marks the eastern edge of the historic village as it was developed according to 1936 and 1938 plans. It has two four-unit rows and two six-unit rows.

Conifer Lane extends east and west crossing Broad St. It terminates in a cul-de-sac on the east at the western edge of Dale Creek Park. Originally it terminated in a cul-de-sac at the eastern edge of the School Woods. There is a cluster of houses at each end of the street consisting of a total of four twin dwellings (Photograph 13) and eight single-family dwellings. It is part of the rectilinear grid that characterizes the arrangement of residential streets at the southern end of the village south of Schoolway and Crocus Ct. It lies half way between

Crocus Ct. and Catalpa St. and has four-way intersections at Broad St., Dale Lane, Dendron Lane, and Currant Lane. One house, at the southeast terminus was built as part of the 1940s Clover Lane addition.

Carnation Court is a cul-de-sac that extends south from Schoolway and consists of two four-unit rows and four single-family dwellings.

Currant Lane is a rectilinear street that runs parallel to and east of Broad St. It is part of the rectilinear grid that characterizes the arrangement of residential streets at the southern end of the village. It connects Conifer Ct. and Catalpa St. It has two twin dwellings and fifteen single-family houses.

Cornflower Lane is a short street that runs north from Catalpa St. to Conifer Lane. It is one of the few streets laid out in Peet's original plan that was not built out until after World War II, when it was subdivided into house lots. Mostly reflecting Ranch or Cape Cod styles, this group consists of ten single-family houses built between 1947 and 1952; six are classified as contributing buildings.

Clover Lane is a long, curvilinear, north-south road on the east side of the village between Schoolway and Southway. It crosses Dale Creek, and the yards on the west side back to Dale Creek Park. The lane gracefully forms a gentle arc as it descends to the creek, where the curve reverses and the lane continues southward to end at Southway. The original vehicular bridge that crossed Dale Creek is no longer extant and has been replaced with a bridge built at road grade with low stone-faced walls. Only the houses north of the creek were completed in the initial period of the village's construction. This group of homes consists of four twins and twenty-two detached, two-story houses in chain configuration with narrow setbacks, gable end to street, side service courts and detached garages (Figure 10). An old barn adapted for use as a neighborhood recreation center and a little theater stood east of Clover Lane until the 1950s when it was demolished and replaced (about 1955) with a new house (no. 5712).

In 1946, the original fifty-two lots south and west of the creek were subdivided and sold as thirty-one individual parcels on Clover Lane, Catalpa St., and Cornflower Lane in an effort to provide housing for veterans. After a set period of time, the remaining lots were made available to the general market. On Clover Lane, nine single-family houses in the Ranch or Cape Cod style were built between 1946 and 1952; four were built later in the 1950s. The Greendale Community Church was built on the corner of Clover and Southway, with initial construction in 1953.

Dale Lane is a rectilinear street that runs parallel to and west of Broad St. It extends south from Crocus Ct. and connects midway with Conifer Ct. and ends at Catalpa St. It is part of the rectilinear grid that characterizes the arrangement of residential streets to either side of Broad St. at the southern end of the village. It has a variety of housing types: eight twin dwellings, and five four-unit rows (Photograph 14) and two single family houses. The houses on the east side back to a tree-lined, grassy strip that runs along the west side of Broad St. south of Crocus Ct.

Dendron Lane is a rectilinear street lying parallel to and west of Dale Lane. It extends north and south from Conifer Ct. The northern section ends in a cul-de-sac just short of Crocus Ct., and the southern section ends at Catalpa St. It consists of eight four-unit rows and one six-unit row, and grouped garages are located beside and behind most of the multiple-unit row dwellings. It is part of the rectilinear grid that characterizes the arrangement of residential streets south of Crocus Ct. A paved pedestrian path leads north from the cul-de-sac to Crocus Ct.

Small House Design and Construction

Begun in 1936 and completed in 1938, the Greendale homes were designed as small architecturally-related groups closely abutting the narrow residential courts and lanes that made up the innovative Greendale plan (Figures 13 & 14). While the grouping of houses was recognized by a number of housing analysts, including Henry Wright, Catherine Bauer, and Thomas Adams, as a major way of reducing construction costs and allowing greater area for yards and open parkland, it also provided the social advantages of neighborhood living. The placement of homes close to the street with little setback represents a striking departure from nineteenth- and early twentieth-century preferences for spacious front lawns in the upper-middle income suburbs derived from Olmsted and Vaux's archetypal suburb of 1869, Riverside. By the 1920s, mandatory setbacks were being pushed by professional planners and zoning advocates. The Greendale practice was inspired, in part, according to designer Elbert Peets by the layout of colonial American towns such as Williamsburg, Virginia, and traditional farm villages of Europe.[19] The arrangement of the residential buildings on courts and cul-de-sacs, in effect, provides a sense of enclosure to the street, providing convenient access to residents while limiting traffic and creating an intimacy intended to encourage neighborliness among residents.

The historic village of Greendale was intended as a demonstration of innovative methods of home-building and the cost-reducing methods of large-scale construction. The overall emphasis was on providing a comfortable and convenient living arrangement for lower-income Americans, one which would offer the amenities and spaciousness commonly associated with the upper income neighborhoods or higher priced apartments built by community builders in the 1920s. Building upon the successful innovations presented in previous Garden City communities, such as Mariemont and Radburn, the greenbelt communities were intended to demonstrate 1) the usefulness of cost analyses prior to design, and 2) the savings inherent in the grouping of houses for economy, large-scale construction, and the use of less expensive building materials and methods of construction. Modern comfort and convenience could be offered in a home equipped with essential appliances and utilities, and built from scientifically derived house plans, where the allotment of interior space was carefully calculated for function, life style, and efficiency.

The 572 dwelling units built in 1936 to 1939 occupy 366 buildings. Originally, 750 units were planned, with twenty-three different types of house plans.[20] Of the 572 units that were constructed, 274 (forty-eight percent of the total number of units) are single-family detached houses, forty-five buildings are two-unit twins (ninety units, or sixteen percent), ten buildings are three-unit row houses (thirty units, or five percent), twenty-two are four-unit row houses (eighty-eight units, or fifteen percent), and fifteen are six-unit row houses (ninety units, or sixteen percent). The three-bedroom configuration is most common, with 272 such units. Some 230 dwellings have two bedrooms, while fifty-two have one bedroom and eighteen have four bedrooms. Every unit also incorporates a good-sized kitchen (ranging from ten by twelve feet to nine by seven-and-one-half feet), [21] a living room, a dining alcove, a bathroom, a utility room, and a few small closets. There are no basements, but attic storage space is available in each of the units.

Each residential building is constructed of "cincrete" block (concrete block made with cinders), set on a poured concrete foundation (Figure 12). The exterior walls exhibit a thin layer of smooth stucco. Originally painted in

[19] In addition to his 1934 writings on L'Enfant's plan for Washington, Peets was likely influenced by the widely publicized research by Kenneth Chorley and Arthur Shurcliff on Virginia's colonial capital. He was also familiar with Camillo Site's ca. 1890 theories on European city planning, and the early twentieth-century writings of Frank A. Waugh on country planning and rural improvement (sponsored by the American Civic Association and Russell Sage Foundation).

[20] "Comparative Architectural Details," *American Architect and Architecture* 149 (October 1936): 30.

[21] Arnold R. Alanen and Joseph A. Eden, *Main Street Ready-Made: The New Deal Community of Greendale, Wisconsin* (Madison: The State Historical Society of Wisconsin, 1987), p. 45; [Walter Kroening], "The Story of Greendale," in *This is Greendale* (Greendale: Greendale Decennial Committee, c. 1948), p. 13.

pale shades of a variety of colors, some have been clad with synthetic siding.[22] Many residential buildings retain original elements such as wooden, double-hung sash windows in six-over-six configuration, gabled or shed-roofed overdoors or porticos, red tile or asphalt shingle roofs, and shed-roofed porches. Replacement windows and enclosed porches are not unusual. On the interior, the first floor consists of a living room, kitchen, dining alcove, and utility room, each with asphalt tile flooring (Figures 17 &18). A straight, wooden staircase with a streamlined wooden handrail provides access to the second-story hall and bedrooms which have maple or oak board flooring. Each unit has a single bathroom, typically located on the second floor. Many units have installed carpeting or other materials on top of the original flooring. The walls are finished with plaster. Interior woodwork includes simple baseboards, and door and window surrounds with compound moldings. In most units, the ceiling in the living room is left exposed, as in the original design, displaying ponderosa pine beams and the wood subfloor above.[23]

When Greendale opened to tenants in 1938, each unit included an electric stove (range) and refrigerator, a wall-mounted porcelain sink with drain board, and metal cabinets in the kitchen (Figure 18); porcelain sink, tub and toilet in the bathroom; and a forced-air furnace (coal-fired), a laundry stove (coal-fired) for heating water during the summer, a large coal storage closet, and a double concrete laundry sink in the utility room. Many units retain original sinks, bathtub and toilet.[24] Greendale's designers had intended to furnish all the dwelling units with furniture designed by the RA's Special Skills Division. The simple, functional wooden furniture, published in *House Beautiful*, was intended to "radiate a degree of taste-forming influence."[25] However, furnishings had to be eliminated from the budget due to a lack of funds, and the furniture proved too expensive for tenants to buy themselves.[26]

Ninety percent of the residential units were planned with a garage. The garages are incorporated into the design of many of the multiple-unit row dwellings (Photograph 8, Figure 21), while single-family and twin houses have either attached or detached garages (Photographs 5, 7, & 13). The freestanding garages were flat-roofed and finished with board-and-batten siding and originally had gravel floors. All of the garages accommodated one car, and closed with a pair of wooden doors that opened outward. Throughout the village, some of the garage doors still exhibit the original Colonial Revival-influenced strap hinges of dark metal (Photograph 7). Synthetic siding and a sloped roof have been installed on many of the garages and many single car garages have been replaced with larger ones, where space on the lot allows.

Of the 274 single-family detached houses, 230 are three-bedroom units, and forty-four are two-bedroom units. Greendale's single-family houses are two stories tall, rectangular or ell-shaped in plan, and capped with either a hip or gable roof (Photograph 5, Figure 11). A shed- or gable-roofed overdoor shelters the principal entrance of many houses. Each house possesses a broad chimney and a flat-roofed porch, the latter typically attached to a façade away from the street. Some homes are trimmed with brick corner pilasters or quoins. In form and details, the houses recall Colonial American residences while demonstrating the advantages of using scientifically determined principles of design as well as alternative building materials and methods of construction.

The "chain house" siting of the single-family units is highly unusual (Figure 15).[27] Each house is off-set on its lot, built close to the street and along the side line of the lot, creating an L-shaped yard (Photograph 5). The

[22] Interview, John Munger, Greendale Resident since 1938, with Elizabeth L. Miller, Greendale, Wis. 18 June 2003; Interview, Minnie Frew, Greendale Resident since 1938, with Elizabeth L. Miller, Greendale, Wis. 18 June 2003.

[23] "F.S.A. Farm Security Administration," *Architectural Forum* 68 (May 1938): 424.

[24] "Comparative Architectural Details," p. 32. The heating for many multiple-housing units was provided by the central heating plant.

[25] Harry H. Bentley, "Low Cost Furniture," *Summary Reports and Recommendations,* p. 133, John S. Lansill Papers, Special Collections, University of Kentucky Library, Lexington, Kentucky, quoted in Alanen and Eden, p. 45.

[26] Alanen and Eden, p. 45.

[27] The term "chain house" was introduced by Alanen and Eden, p. 42.

garage is attached to the rear corner of the neighboring house, linking the houses and garages along each side of the street like a chain, forming a court between each pair of houses. Elbert Peets referred to the court as a "*Hof*," a term used in Germany to refer to the space around which buildings in European farm villages were arranged. Just as was the case in those farm villages, the principal entrance into each single-family house in the original section of Greendale faces the court, rather than the street, giving the resident privacy going between her car and home.[28] Although there is an entrance into each house from the street, it is a service entrance, into the utility room. Most of the residential lanes run north-south, so that the main entrance of most single-family houses faces south. The layouts of the single-family houses vary, but each features the reverse-front plan introduced at Radburn with the utility room and the kitchen on the street or service side of the house, and the living room and dining alcove away from the street on the garden side. The bedrooms and single bathroom are located on the second floor.

Twin Houses

The village's original forty-five twin houses contain ninety housing units. Six are one-story twins, nicknamed "honeymooners," having twelve one-bedroom units. Thirty-nine are two-story buildings offering a total of sixty two-bedroom units and eighteen four-bedroom units. Each twin building is rectangular in plan, displays a hip roof with the ridge parallel to the street, and has a symmetrical elevation with a wide, central chimney. The housing units that make up each twin are arranged as mirror images with the utility rooms, bathrooms, and kitchens placed back-to-back to reduce the costs of plumbing and utilities. The six one-story twins are located on Northway west of the village center (Photographs 9 & 11). They were built without garages and are entered through shed-roofed porches placed at opposite ends of the building facing the side garden.

Thirty twin dwellings contain a pair of two-bedroom units (Figure 20), and nine contain a pair of four-bedroom units. Each unit has two entrances, one on the service side overlooking the street and the other on the garden side perpendicular to the street. The exterior design features brick corner pilasters, a cornice with brick modillions, and, facing the street, a central, projecting, hip-roofed section with side-by-side garages (one for each unit) with an open or enclosed entry porch to either side (Photograph 7). Each of the thirty, two-bedroom, twin houses exhibits a central, two-story, street-facing gabled bay, flanked by shed-roofed porticos as though two houses with gable-fronted ells were pressed together back-to-back (Photograph 13). These buildings are paired with detached garages, lying perpendicular to the street. Each garage is set to the side and in front of its respective unit, forming a court or *Hof* between the house and its garage. Like the single-family houses, the principal entrance into these units is through the court. The interior layout of each type of twin house exhibits an innovative, economical plan with the utility room and the kitchen in each pair of units set back-to-back, the utility rooms located adjacent to the street with service entrances in the form of tiny vestibules. Each living room extends the full width of the house to either side of the kitchen and utility room. Each living room is afforded the maximum amount of privacy and in part faces the garden. In the two-story buildings, the bedrooms and bathroom are located on the second floor, with the bathrooms set back-to-back to share a single stack of utilities.

Multiple-Unit Row Dwellings

The original section of Greendale includes ten three-unit row or group dwellings, fifteen six-unit row dwellings, and twenty-two four-unit row dwellings. The housing unit is the basic component of each multiple-unit row, and a number of variations exist throughout the community to accommodate families of various sizes and a variety of life styles. Most units have a built-in or adjacent, detached garage, and all have private entrances and yards. Each row dwelling is rectangular in plan, with a hip roof, its ridge parallel to the street. The row house

[28] Elbert Peets, "Greendale," in *On the Art of Designing Cities: Selected Essays of Elbert Peets*, Paul D. Spreiregen, ed. (Cambridge: M.I.T. Press, 1968), p. 220.

buildings feature broad, interior chimneys, and a symmetrical street-facing façade. Many display brick corner pilasters and brick door surrounds. Unlike the single and twin houses, the principal entrance of each unit faces the street.

The typical three-unit building exhibits a central, two-story, street-facing, gabled projecting bay trimmed with brick corner pilasters; the lower floor of the bay accommodates a pair of garages and a central doorway that leads to the stairway to the second-floor unit (Figure 19). On some three-unit row house buildings, a balcony with a plain wood rail extends across the gabled bay. A door is centered on the street-facing façade of each of the flanking two-bedroom units, and is sheltered with either a gabled or shed-roofed overdoor, or a gabled projecting portico with wooden lattice sides. Three-unit houses include one central, second-story "bachelor" unit (so-named for its tiny kitchen) flanked on each side by a two-story, two-bedroom unit. Accented with a gabled or shed-roofed overdoor, the central doorway gives access to a private stairway leading to the bachelor unit (located on the second floor). The garages belong to the two-bedroom units; the bachelor units have no garage but include a first-floor utility room located behind the garages and stairway. The six-unit buildings are composed of two, three-unit buildings, placed side by side (Photograph 8). Each has two one-bedroom bachelor units and four two-bedroom units, arranged so that utilities and plumbing for each unit are located back to back.

Two types of four-unit row dwellings were designed for the village. One consists of two of the twin house buildings that have street-facing, gable-fronted bays, set next to each other with a group of four garages off-set to the rear (Photograph 14). The other type of four-unit dwelling consists of two of the two-story twin houses (with a central one-story, projecting bay housing garages), set side by side (Figure 21). Four identical three-bedroom units make up the four-unit row dwellings and are arranged so that the utilities and plumbing are located back to back in each pair of units (Figure 22). Each house unit has a private yard and a porch on the garden side (Figure 23).

The layout of the house units in the three- and six-unit buildings, and in the four-unit buildings with built-in garages, is more traditional. The kitchen and utility rooms are on the garden side, while the L-shaped living room overlooks both the service and side yard. The entry porches at the far ends of each building of the twin buildings are moved to the garden side where they are attached to a one-story rear extension housing the utility rooms of each adjoining pair of units. The bedrooms and bathrooms are upstairs, with the bathrooms above the utility room. In the bachelor unit, the utility room is on the ground floor, beneath the staircase that rises to the second floor. Upstairs, the living room and the bedroom are on the service side, and the kitchen and bathroom are on the garden side. The four-unit buildings with projecting gabled bays display the same floor plans as the twin houses they match; a modified reverse-front plan with the utility room on the service side, the kitchen behind it overlooking the garden side, and the living room with windows on both the service and garden sides. For economy of construction and household efficiency, the utility room, kitchen and bathroom for each unit of the row dwellings are arranged in a cluster and stacked side-by-side with those of the adjoining unit.

Clover Lane Addition (1946 to 1952)

The street layout of Cornflower Lane, the south end of Clover Lane, and the eastern extension of Catalpa St. are seen in the 1938 plan. While the streets were built, the houses were not. The undeveloped area originally consisted of fifty-three parcels of the same size as those in the developed areas of the original village. In 1946, this area was replatted as the Clover Lane Addition and the parcels were put up for individual sale as the first privately-sold parcels, in anticipation of the eventual sale of all the Federally owned housing in Greendale (which finally occurred in 1952). The new addition offered thirty-one house lots on Cornflower Lane and the southern end of Clover Lane, and reserved a large corner parcel at the southern end of Clover Lane for church construction. At the same time, seven of the original lots were set aside for additional park land at the intersection of Broad and Catalpa.

Village assessor's records indicate that the addition was built out over a ten year period (1946-1956). Buyers were to hire their own contractors, but were encouraged to band together to leverage their buying power for materials. Despite the challenges in securing builders and building materials in the years immediately following the war, half of the houses were standing by 1949. The earliest houses built were located on the large lots at the east end of Catalpa, with others on Cornflower. Among the earliest residents of the addition were families that moved from the Federally-owned rental housing in the community. The houses are generally variants of the Ranch or Cape Cod styles. While most of the houses in the 1946 addition fall within the period of significance, several were built after 1952 and are considered noncontributing, as are earlier houses that were significantly enlarged or altered after the period of significance.[29]

Jacquelyn Robbins won the home at 5900 Cornflower Lane as the result of a jingle contest sponsored by Greendale's American Legion post. Her winning jingle read:

> Oh give me a home, a home of my own,
> With room for a youngster or two.
> So sings my wife, the light of my life,
> Since landlords say tots are taboo.

Builder Fred A. Mikkelson constructed the "$10,000 Dream Home," and Sears furnished it. Mrs. Robbins moved into the newly completed house from an apartment in Milwaukee in 1948.[30]

Later Housing

Several residential buildings were constructed within the historic village after 1952, which marks the end of the period of significance, and are considered noncontributing. The Northway Apartment Complex at 6705 Northway was erected in 1963. It is composed of three, rectangular, brick-finished buildings arranged in a U around a central courtyard. In 1967, two small, two-story, two-unit apartment buildings were built at 5900-02 and 5908-10 Broad St., south of Conifer St. on land originally developed as narrow strips of green space abutting Broad St. (the pharmacy and dentist's office and Layton State Bank are similarly situated). They are basic and nondescript in style and screened with heavy plantings of shrubbery. Three Ranch style houses were built on West Grange Ave. (nos. 6771, 6777, and 6799) between 1956 and 1960 on a site at the north end of Arrowwood that was originally known as Grange Park. Another house was built in 1958 on the large corner parcel at 5584 Angle Lane; it has a steeply-pitched, side-gable roof and blends in well with its neighbors. A house was constructed within the original portion of Clover Lane about 1955. The ranch style house at 5712 Clover Lane occupies a portion of a parcel that, until the development of the adjacent residential areas, contained a barn and other remnants of a farmstead.

The Village Center

The Greendale plan places the center of business, administration, and commerce, at the northern end of the major north-south axial corridor, more or less situating it in the physical center of the community (Figure 5). Between 1936 and 1939, four administrative/institutional buildings were erected in the original section of Greendale and four commercial buildings, two in the form of freestanding buildings and two in the form of multiple-unit commercial blocks. The Greendale Village Hall, Police and Fire Station, Public Works Building, and Community Building and School housed the village's administrative functions, while a restaurant, post

[29] Dates of construction are drawn from newspaper reports in *The Greendale Review* and the assessor's records.
[30] "Winning Home Creating Problem," *Racine Journal Times, 13* November 1947, p.25; *Greendale: 50 years, 1938-1988* (Greendale, Wis.: Greendale, 1988), p. 51.

office, movie theater, and a host of small stores served the community's basic commercial needs. Designed by architect Walter G. Thomas, all are built of brick-faced masonry construction.

Administrative and Community Buildings

The Greendale Village Hall (1938, contributing) is situated at 6500 Northway, at the north terminus of Broad St. Inspired by the Capitol at Colonial Williamsburg (Virginia), it is a fine example of the Colonial Revival style (Photograph 4) and retains a high degree of historic integrity befitting its stylistic prominence and location at the head of Broad St. and the northern terminus of the main axis of the 1936 plan. The village hall displays the traditional five-part plan with a symmetrical front-facing façade, and rests on a poured concrete basement. The building is trimmed with brick quoining and the roofs are surfaced with tile. In the center of the front-facing façade is a tall, projecting pavilion with a hip-with-deck roof, crowned with a square, wooden clock tower and topped with a weather vane depicting a rooster. At either end of the building are hip-roofed dependencies. A gabled hyphen joins each dependency to the central pavilion. The central pavilion exhibits three tall, segmental-arched window openings with twenty-over-twenty double-hung sash windows. Evenly-spaced, twelve-over-twelve windows appear in the side dependencies. The two main entrances are centered in the hyphens. Each consists of a pair of wood-and-glass doors surmounted by a fanlight and recessed in a round-arched opening. A small, four-over-four, double-hung sash window can be seen on either side of each entrance. The village hall displays excellent integrity and retains its original function, housing administrative offices and the council chamber.

The Flagpole Sculpture (1938, contributing) is located on the Mall, a formal lawn south of Schoolway and west of Broad St. (Photograph 3). The Special Skills Division of the U. S. Resettlement Administration commissioned Alonzo Hauser to design a flagpole sculpture for Greendale in 1938. Alonzo Hauser (1909-1988) was born in Wisconsin and studied art at Wisconsin State College of La Crosse (now the University of Wisconsin-La Crosse), the Layton School of Art in Milwaukee, the University of Wisconsin-Madison, and the Art Student's League of New York. Hauser enjoyed a long career as a sculptor and was later an instructor in the School of Architecture at the University of Minnesota.[31] Carved of limestone quarried at Currie Park on the north side of Milwaukee and dedicated in 1939, the sculpture displays six life-size figures standing on a raised platform. These figures represent the people who would build and live in Greendale, and include a laborer with a shovel, one with a sledgehammer, a mother and child, a young woman with a tennis racket, and man in a suit and tie. Recently installed, a bronze plaque on the east face of the sculpture commemorates Hauser and the symbolism of this piece.

The Greendale Police and Fire Station (1938, contributing) at 6600 Schoolway, just west of Parking St., is currently vacant (Photograph 3, to the left). The building consists of three sections: the one-story, flat-roofed police station (east); the two-story, projecting, hip-roofed fire station (center); and the one-story, flat-roofed heating plant (west). All three sections are embellished with brick quoining and retain original, double-hung sash windows, showing the influence of the Colonial Revival style. The police department was entered from Parking St., through a centrally-placed, wood-and-glass door, set in a segmental-arched opening. On the Schoolway (front) façade, the fire station section displays two large garage door openings. These were enclosed with glass in 1967, when the fire department moved to new quarters at 6200 West Loomis Road. The police department continued to occupy the building until 1998, when the Greendale Safety Building was completed at 5911 West Grange Ave. outside the historic district.[32] A central heating plant appended to the Police and Fire Station originally heated all the commercial and administrative buildings.

[31] Alanen and Eden, p. 119.
[32] "Greendale Police Department," and "Greendale Fire Department," Binder, Greendale Historical Society.

The Greendale Public Works Building (1938, contributing) is located at 6700 Schoolway, just west of the old Police and Fire Station. Presently unoccupied, it is a one-story, flat-roofed structure with a square corner tower used to hang the fire hoses. The main block is enriched with brick quoining, and the flat-roofed tower exhibits quoining, clinging buttresses and other decorative brickwork. Office and garage space occupies the main block, while the fire department used the tower for drying hoses. The public works department moved to a new building outside the district at 6351 Industrial Loop in 1961. The police department subsequently used the building until 1998.[33]

The Greendale Community Building and School (altered, noncontributing), now Greendale Middle School, is situated at 6800 Schoolway, on a rise at the west terminus of the street. It was designed with 30 classrooms, a gymnasium/auditorium, and space for a public library (in residence until 1970). In the early years, an adult education program and a youth center operated in the building, and the gymnasium/auditorium hosted village social events and Sunday church services. The building is utilitarian in appearance and possesses a sprawling, T-shaped plan, with the top of the "T" oriented north-south. It has one- and two-story sections with flat roofs and exhibits regularly-distributed, multipane windows. The principal entrance is on the north-facing façade, where a one-story, flat-roofed entrance porch with an octagonal cupola was added in 1997. A stone panel, carved by New Deal sculptor Alonzo Hauser in 1938-39, was installed on either side of the original entrance; it was carefully removed during the recent renovation and was reinstalled in the new brick entrance. The western panel depicts a girl holding papers, with a flower and a spool of thread in the background. The eastern panel features a boy playing a banjo and singing against a backdrop of musical notes. Hauser also carved a stone panel showing a child with a cat, a dog, a goat and a rooster. It is still in place over what was the entrance into the kindergarten room, on the east-facing façade at the south end of the building. In 1970, the building was expanded eastward with a gymnasium addition, appended to the original gymnasium. This addition covered another stone panel carved by Hauser, showing a farm couple with a foal. In 1997, a one-story, flat-roofed addition was attached to the northeast corner of the 1970 gym.[34] Because of the substantial additions to the most visible of all the elevations (at the terminus of Schoolway), the former community building and school is now considered to be noncontributing. The building sits at the edge of extensive grounds, labeled on the historic plan as "School Park" but commonly called the "School Woods." The Canterbury Grade School (noncontributing) was constructed in 1965 west of the former community building at the southwest corner of the present-day park. The entrance to the new elementary school and its parking lot are reached by automobile from the newer housing areas west of the historic core, although pedestrian paths and a common playing field continue to link the school with the historic district.

Commercial Buildings

The original commercial buildings were designed by architect Walter G. Thomas and erected between 1936 and 1938. They were clustered together forming a commercial center on the west side of Broad St. The Greendale Village Inn, original U.S. Post Office, Greendale Theater Block, and Stores Block were arranged with varying setbacks on the west side of the 5600 block of Broad St. Wide sidewalks and off-street paved parking fronted the stores with entrances leading off of Broad St. Each commercial building showed the influence of the Colonial Revival style and was built of brick-faced masonry construction, trimmed with brick quoins and accented with wooden, multi-pane windows. Covered walkways with Chippendale-style rails connected the separate buildings. The original layout of the parking lot called for one way lanes and angled parking to facilitate incoming and outgoing traffic. The rear of the buildings faced Parking St., which provided access to the Greendale Cooperative Service Station (now significantly altered), a large parking lot, and several public

[33] "Department of Public Works," Binder, Greendale Historical Society.
[34] Village of Greendale Building Permits, Greendale Village Hall, Greendale, Wisconsin.

service buildings. The parking lot is original to the plan and represents a continuation of the separation of vehicular and pedestrian traffic.

The Greendale Village Inn (1938, contributing) is located at 5601 Broad St., at the north end of the commercial district (Photograph 1). Opened as a traditional Wisconsin family-oriented tavern, complete with Friday fish fry, it is still in restaurant use. The original section, a fine example of brick Colonial Revival architecture likely inspired by the simple Tidewater cottage, is a one-story, side-gabled structure with a gabled vestibule centered on the front-facing façade. A multipane, fixed window appears on either side of the portico. The original open patio to the rear has been enclosed. A one-story, brick-finished addition has been attached to the south (side), and another has been appended to the west (rear). These additions are compatible in scale and materials with the original section of the Greendale Village Inn, and their placement to the side and rear of the building minimizes their impact.

The original U.S. Post Office (1938, contributing) at 5621–23 Broad St. stands between the Greendale Village Inn and the former Greendale Theater Block. The post office occupied the first floor of this building until a new facility was completed at 5741 Broad St. in 1965. Offices for a doctor and a dentist were located on the second floor for many years. The building is set back from its neighbors and overlooks a small courtyard with a fountain. Named "Eleanor's Courtyard," in honor of First Lady Eleanor Roosevelt, who visited Greendale in 1936, the courtyard and fountain were constructed in 1998. The old post office is a two-story block with a low-pitched, hip roof (added at a later date) and a symmetrical façade. A wood-and-glass door surmounted by a single-pane transom flanks either side of a group of three, large, wooden, multi-pane fixed windows. Six, wooden, double-hung sash in six-over-six configuration appear at the second story. The building is embellished with rustication, formed by short courses of projecting brick stretchers. A triangular center gable was added to the roof in 1997 and the windows have been replaced, but the post office still retains its historic identity.

The Greendale Theater Block (1938, altered, noncontributing) was a popular feature of the village center, and reflected the community's desire to provide for entertainment close to home, as well as the interest of the greenbelt town designers in integrating the design of the movie theater, which was growing in popularity, into the design of the suburban shopping center. The block consists of a one-story, flat-roofed front section, and a two-story, hip-roofed rear section. The two-story section originally held the theater auditorium while the one-story section contained the theater vestibule and ticket office (at the south end), and five small storefronts. Each storefront had a display window composed of grouped, multipane fixed windows. The first businesses in these shops included the Greendale Credit Union, a shoe store, a barbershop, and a beauty shop.[35] The Greendale Theater closed in 1968.[36] The entire block was remodeled in 1997 and currently contains six east-facing stores. The original stores were expanded outward toward the street and a portico with simple columns and a variety of gabled parapets extend across the front façade (Photograph 1). The back and side elevations retain much of their original appearance.

The Stores Block (1938, no longer extant) was situated at 5647 Broad St., south of the Greendale Theater Block. The block was a one-story, flat-roofed building, finished with brick; it originally housed three large storefronts, each with grouped, multi-pane display windows. The first tenants were the Greendale Co-operative Grocery, the Greendale Co-operative Variety Store, and Des Jardin's Drugstore (which included a soda fountain and grill).[37] In 1990, the Greendale Public Library (noncontributing) was built on the site. The new building

[35] Munger, 31 May 2003; historical photographs, Greendale Historical Society.

[36] Greendale Remembers: The Story of the Village in the Voices of Its People (Greendale, Wisconsin: Greendale Historical Society, 1998), p. 47.

[37] Munger, 31 May 2003; historical photographs, Greendale Historical Society.

reflects a contemporary design and is finished with orange-red brick veneer embellished with narrow courses of white stone.

The former Greendale Cooperative Service Station (1938, altered, noncontributing) stood at 6601 Northway, just west of Parking St. Located at the rear of the commercial buildings on Broad St., it was built as a component of a transportation hub that also included a bus shelter or waiting station (no longer extant) and ample space for commuter or customer parking. As a safety measure, the service station was sited so that it was visible from Northway, a collector street, but accessible only from Parking St. Originally composed of an office section and five garage bays, the building was remodeled for offices ca. 1970 and bears little resemblance to its historic use. The garage bays now hold windows, the brick finish is covered with modern materials, and wood-shingled pent roofs have been installed at the roofline. Because of the significant alterations and the loss of historic character, the building is noncontributing.

An Expanding Village Center (1952 to the present)

As early as 1948, Elbert Peets proposed adding three small freestanding commercial buildings on the east side of the street: one at the corner of Broad St. and Northway, and one on each side of Schoolway at Broad St. He proposed a much larger commercial building at the location of the tennis and horseshoe courts south of Schoolway along the west side of Broad St. When the area was developed years later, Peets's recommendations were only partially considered.

With the community passing to private ownership in 1952 and 1953, growing concerns about the lack of a commercial and industrial tax base and the ability to finance school and village services led to further discussions about the expansion on the village's commercial core. While the number of residential properties within the corporate boundaries increased dramatically in the decade of the 1950s, other development had stagnated. A January 1960 study noted that the population and number of housing units in 1950 had been 2,752 people and 625 units; by 1960 those estimated numbers were a population of 6,600 and 1,700 dwellings.[38] Another study noted that lack of business development led to over fifty percent of purchasing dollars to be spent outside of the village.[39] Despite the protests of a number of original residents, the east-side shopping strip was built between 1958 and 1961 on former parkland.[40] Around 1963, the shopping facilities in the original core were reconstructed and enlarged.

Greendale's commercial base continued to expand and evolve in the 1960s and 1970s. A large grocery store (now converted to shops and offices) and a post office replaced the former tennis courts in 1965. Additional offices and a bank were built on the east side of Broad St., south of Crocus, in 1966 and 1971. The largest commercial development occurred just north of the historic boundary with the construction of Southridge Shopping Center in 1970.

The shopping center at 5602–90 Broad St. (two noncontributing buildings) was built in 1958 on the western edge of Dale Creek Park, opposite the original commercial block. Originally utilitarian in appearance, it was remodeled ca. 1995 and now consists of two one-story, flat-roofed commercial strips faced with red brick and embellished with a hipped-roof corner clock tower and decorative, gabled parapets. A metal arch bridge (noncontributing) was erected in 1998 behind the recently remodeled shopping center on the east side of Broad

[38] Howard Ferguson of J.L. Jacobs and Company for the Milwaukee Community Development Corporation, "Effect of Past Proposed Development Upon Financing of School and Village Services in Greendale, Wisconsin," January 1960.

[39] Carl L. Gardner and Associates and Howard Ferguson, "General Plan and Proposed Zoning Ordinance," 1962.

[40] Many opponents railed against an early proposal to eliminate the axial vista along Broad Street and close the street to vehicular traffic to accommodate a parking lot. Others opposed the size of the proposed commercial development and the loss of original parkland.

St. Located half-way between Northway and Schoolway, this bridge provides an attractive entrance to Dale Creek Park from the shopping center and is considered substantial enough in size to be counted as a noncontributing structure.

The Wisconsin Savings and Loan Building (noncontributing), now the Associated Bank, is situated at 5651 Broad St., at the south end of the original commercial core. Built in 1970, it is a one-story, Neo-colonial edifice veneered with red brick. The former Sentry Food Store (noncontributing) now divided into a row of smaller stores, was erected at 5711 Broad St. in 1965, together with the adjacent U.S. Post Office (noncontributing) at 5741 Broad St. Both buildings are one-story, flat-roofed structures finished with red brick. A glass atrium has been added to the front of the former grocery store covering its earlier Neo-colonial style. The post office is still in operation and reflects a simple, utilitarian character. In 1938, tennis courts and a horseshoe pit occupied this site, although it was intended as the future site of the library.[41] In 1966, a pharmacy and dentist's office (noncontributing) was erected at 5800–08 Broad St. in the block south of Crocus Ct. A utilitarian structure, it is one-story in height and now functions as an office building. Immediately south at 5850 Broad St., the one-story Layton State Bank (noncontributing) was constructed in 1971. Because of construction dates outside of the period of significance and in alteration of the original plan, all of these buildings are classified as noncontributing resources.

Two small sculptures (not in count because of their small scale) occupy prominent locations in the core of the historic shopping area. The court in front of the old post office at 5621–23 Broad St. has been redesigned and named "Eleanor's Courtyard" to commemorate First Lady Eleanor Roosevelt's 1936 visit to Greendale and provide a pleasing outdoor sitting area. Installed in 1998, the centerpiece is a round fountain with a low, exterior wall finished in brick. A small, bronze sculpture depicting two children huddled under a rain umbrella rises from a concrete pedestal set in the center of the fountain. Another outdoor sitting area has recently been constructed at the intersection of Northway and Broad St. across from the village hall. Its centerpiece is a similarly designed brick-faced, circular planter featuring seasonal flowers and a small bronze sculpture of an energetic, laughing young girl skipping through the flowerbed. Due to their recent date, these features are not historically significant; because they are considered small in scale, they are not included in the count of noncontributing resources.

As part of the 1997 remodeling of the non-historic store blocks on the western edge of the original park, an inviting alley way (with an outdoor patio) and an arched pedestrian bridge (noncontributing) now connect the shopping district with Dale Creek Park. Built in 1995, the Dale Creek Park Gazebo (noncontributing) is a polygonal, open-sided, frame structure with a low-pitched tent roof and a polygonal cupola. Located at the southeast corner of Schoolway and Broad St. in the only remaining portion of the park that borders Broad St., it is used as a bandstand for village concerts during the summer.

Two church buildings were built in the original section of Greendale. Although land was set aside for this purpose in the early plans, construction of the current buildings did not take place until after the period of significance. St. Luke's Lutheran Church (noncontributing), located on Northway just west of the shopping area, is a brick, Neo-Colonial building. Erected in 1962, it replaced a smaller, frame church that had been built in 1950 on a parcel that was set aside for a church on Greendale's original plan. The original portion of the Greendale Community Church (noncontributing) at the corner of Clover Lane and Southway was completed in 1953. Additions in 1957, 1962, 1968, and 1979 expanded the size of the building and accommodated additional functions.

[41] Peets, "Greendale," p. 227.

INTEGRITY

The historic integrity of the community lies largely in the overall organization and unity of the community plan as developed by Elbert Peets and Jacob Crane and the persistence of village character, with its spaciousness, low-scale construction, ordered yet varied arrangement of streets, casual pedestrian paths, and attractive parks. Secondary to this but no less significant is the design of buildings, predominantly residential with a number of intact public buildings in various stages of preservation, and a few remnant reminders of the designers' early vision for a village-like commercial center (Figure 5). In understanding the historic integrity of the historic village, it is important to look beyond the concerns of bricks and mortar to recognize the full array of values that went into the town's planning and realization. Together these values make the community a unique and irreplaceable national treasure.

Overall, the historic core of the Village of Greendale retains a high degree of historic integrity. The site displays excellent integrity: the plan, the response to the natural topography, the land use distribution, and the vehicular and pedestrian circulation systems remain unchanged. The village's residential units generally show very good integrity. Synthetic siding, replacement windows, and enclosed porches are not unusual, but all houses are easily recognizable as "Greendale Originals," as the villagers call them. While some changes occurred in the residential areas with the alteration of garages and the siding of houses, the area that has seen the biggest change is the shopping area along Broad St.

Like many business and shopping districts, the commercial corridor along Broad St. has changed in response to the periodic need for expansion and modernization (Photograph 1). The first major changes occurred about 1960 with the development of several one-story shopping strips on the east side of Broad St. between Northway and Schoolway. These were built at the edge of Dale Creek Park (formerly Central Park) and altered the relationship of the park to the village center. Several additional commercial and medical buildings were built along Broad St. during the next decade and a half. In the mid-1990s both sides of the commercial corridor between Northway and Schoolway were completely renovated in an effort to revitalize the commercial center by creating an artificial "village" theme. This work called for the extensive redesign of the store fronts facing Broad St. and was aimed at alleviating the utilitarian and linear appearance of the old commercial blocks by adding visual interest and unity in the form of corner towers with hipped roofs and decorative gabled parapets. A gateway between Broad St. and what remains of the former Dale Creek Park was cut through the former ca. 1960 commercial strip and a picturesque bridge was added to embellish the park. While the historic identity of the tavern and original post office remains intact, the theater and series of small shops are no longer visible due to decades of changes and additions. The construction of the new library has added further to the loss of the commercial center's historic character, but attests to the continuing viability of the village center. The two blocks on the east side of Broad St. south of the existing remnant of Dale Creek Park were developed in the 1970s for commercial use as medical offices and a bank; architecturally these buildings contrast with the town's original traditional design; surrounded by parking, their low-scale construction and tree-shaded borders do not interrupt or detract from the visual sweep of the plan's main axis from the village hall to Southway.

Among the original commercial buildings, the historic core of the Greendale Tavern remains intact and exhibits a high degree of integrity (Photograph 1), while the old Post Office, which was altered in the recent downtown remodeling, possesses a fair degree of integrity. The Greendale Theater Block and Greendale Cooperative Service Station have been substantially remodeled and expanded to the extent that their principal façades and interior spaces no longer reflect their historic character. The Greendale Theater Block is still in retail use, and its rear elevations retain a good degree of integrity to the historic period. The Stores Block, however, has been replaced by the modern library, and the former Greendale Cooperative Service Station has been remodeled for use as an office building. Both of these buildings are significantly altered and are classified as noncontributing due to the loss of historic integrity.

The western portion of Schoolway ends at the edge of the School Woods, an extensive, forested hillside site that originally surrounded the former Greendale Community Building and School and provided a park setting with pedestrian pathways connecting with the residential streets to the north and west. Despite the alterations to the commercial buildings and the school the original plan and land uses remain intact and the small-scale village character persists. The original store blocks were built with rear storefronts along Parking St.; in contrast to the front alterations, these elevations retain their original historic character and their spatial relationship with the police station, fire station, and public service building (Photograph 3). Although the Greendale Community Building and School has been altered with a new entrance porch and additions and is now considered noncontributing due to loss of integrity, it is still being used as a school and maintains its prominent position in the village plan.

As noted above, the major alterations have occurred within the parks and green space along Broad St. The shopping center has been erected along the west edge of Dale Creek Park in the 5600 block of Broad St., the extreme east end of the grassy mall (adjacent to Broad Street between Schoolway and Crocus Ct.) has been paved for a parking lot, and two small buildings have been constructed in the narrow strip of greenspace on the east side of each of the 5800 and 5900 blocks of Broad St. While altering the original appearance of the community, these commercial buildings were erected adjacent to the original ones, enlarging the village center, but maintaining a commercial core, in keeping with the original plan of Greendale. Further, Elbert Peets's studies and plans for expanding Greendale, produced between 1945 and 1950, proposed expanding the commercial area to the east side of Broad St. and along Broad St. south of Schoolway.[42] In addition, St. Luke's Lutheran Church stands on a site that the original plan reserved for a church. Finally, apartment buildings were proposed in the original plan, but monies were insufficient to fund their completion during the era of Federal ownership. The cluster of 1960s apartment buildings at the west end of Crocus Ct. have been excluded from the district boundaries since they were built after 1952 on street extensions not in the 1930s plan.

While some of the changes involved the addition of new buildings or the alteration of historic buildings, changes also came with the loss of other resources that were part of the original Greendale community. Many of these changes occurred on the periphery of the historic village and where possible they have been excluded from the NHL boundaries. Two buildings erected in Greendale during the period of significance have been demolished: the Greendale Bus Shelter was razed ca. 1956, and the Store Block was replaced by the new library in 1990.[43] A new fire station replaced the south pumping station and water softening plant at the intersection of Loomis Road and Southway in 1972 (this lies outside the NHL boundaries). The north pumping station, east of Badger Ct. is also no longer extant, replaced by housing developments. The large barn that stood near the intersection of Southway and Loomis Road was destroyed by fire in January 1949. The barn on the east side of Clover Lane that was used for theater and community events was demolished and, in 1955, replaced with a residence. An old farm house in the 6300 block of West Grange Ave. was converted into a boarding house for Greendale's school teachers. Called the "Teacherage," this building, with a garage, storage shed, and barn, stood on 3.19 acres of land outside the northeast corner of the NHL district. American Legion Post 416 purchased this property after the war and in 1969 built the present building.

The exceptionally high integrity of the overall plan and setting—including the network of automobile roads, system of pedestrian pathways, the housing clusters, and the prominently located village hall—outweigh the

[42] Elbert Peets, *Greendale, Wisconsin: Study for Future Development*, dated 18 January 1950, in Elbert Peets, "Residential Site Planning Texture," in Spreiregen, ed., p. 208; Elbert Peets, *Zoning District Map, Village of Greendale, Wisconsin*, 1948, in Alanen and Eden, 77.

[43] Milwaukee Community Development Corporation, *Map of the Village of Greendale, Milwaukee County, Wisconsin*, (Greendale, Wisconsin: Milwaukee Community Development Corporation, 1955); Milwaukee Community Development Corporation, *Map of the Village of Greendale, Milwaukee County, Wisconsin*, (Greendale, Wisconsin: Milwaukee Community Development Corporation, 1958).

loss of the integrity in the commercial core. Despite the loss of park land, architectural changes, and new construction along Broad St., the village-like scale and character of Greendale's town center remain intact and the main axis along Broad St. and the cross axis at Schoolway continue to function as important defining elements of the overall historic plan. While the loss of integrity in the commercial core is unfortunate, it has occurred over several decades and currently reflects recent efforts to revitalize the economic and social center of the community. The most recent architectural changes, including the new library, do not attempt to replicate historic designs but rather use modern decorative elements to suggest Greendale's original architectural vocabulary, such as gabled parapets, hipped roofs, and corner towers.

It must be acknowledged that certain highly significant aspects of the historic plan have been lost, especially the surrounding agricultural greenbelt. There is no question that these losses have precluded a full representation of Ebenezer Howard's garden city concept and Rex Tugwell's utopian vision. On the other hand, Greendale and the other two greenbelt towns were envisioned and built during a brief period of great idealism and direct government intervention in community development. What was considered a failure to create a new paradigm for land use and ownership in Tugwell's mind, has been considered a great success by scholars and designers alike in demonstrating the possibilities for decent housing for the majority of Americans and an ideal for town planning. Each of these communities has created a model for suburban living that has not only been valued by successive generations of homeowners and residents, but has been held in highest esteem by each successive generation of design students in architecture, landscape architecture, and city planning.

The MCDC, which purchased Greendale's undeveloped property in 1953, retained Peets as a consultant and followed his recommendations in large part. Due to financial constraints, the MCDC was unable to maintain the greenbelt in its original form, although a good portion of it remains as the Root River Parkway (marking the west and south boundaries of Greendale), and a low ratio of land in parks to developed areas has been maintained throughout. Peets drew the plans for the new subdivisions, abandoning the arrangement of cul-de-sacs and collector streets in favor of curvilinear lanes that formed graceful loops to better accommodate personal, safety, and maintenance vehicles. No sidewalks appear along the residential lanes, but paved pedestrian pathways wind through the linear greenways and parks in the newer subdivisions, connecting housing to schools, commercial centers and the Root River Parkway. Peets proposed that new homes be sited with a revision of his chain house plan, and new residences were erected with the setbacks and appearance typical of 1950s subdivisions.[44]

The 1930s ideas about regional planning resound in the community's continuing relationship to the region's natural topography of stream valleys, wooded hillsides, and naturalistic parks and parkways, as well as the accessibility to downtown centers of employment provided by orthogonal arterials that pass outside the village boundaries. Despite the differences between the historic core of the town and surrounding development, the setting of the original village remains intact and portions of the original greenbelt have survived in the form of outlying parks. At Greendale, the Root River Parkway sweeps around the southern and western edges of the historic village (west of 76th St. and south of the high school grounds), and the sixty-four-acre Scout Lake Park is located east of Loomis Rd. (approximately from West Grange to just north of Southway). Today this park land is geographically removed from the historic core of Greendale, separated from it by intervening modern development. While these park reservations fall outside the NHL district boundaries, they provide undeveloped parkland, recreational areas, and other compatible land uses that echo the original greenbelt purpose and the then-current ideas about regional planning.

A number of scholars have suggested that Greendale's postwar expansion, more than that of the other greenbelt towns, honored the original purpose and open space provisions of the Neighborhood Unit Plan on which Peets

[44] Peets, "Residential Site Planning Texture," pp. 202-15. These standards reflected the preferences of both the FHA and the Urban Land Institute, whose *Community Builder's Handbook* set the standards for moderately and highly priced subdivisions.

and Crane based the original design (see section 8). Insufficient context currently exists to evaluate the significance of Peets's postwar planning at Greendale. There is no question, however, that the spacious character, generous plantings, preservation of trees, naturalistic siting, and quality of construction evident in the Greendale neighborhoods of the 1950s and 1960s show his influence, while at the same time reflecting a new generation's thinking about land-use planning and the design of garden suburbs. Visual evidence confirms the premise that the new residential development provides a compatible setting and was intended to build upon, not erode, the suburban ideals of 1930s planning.

CONTRIBUTING RESOURCES: INVENTORY

Address	Building Type	Construction Date
5500 Acorn Court	single-family house	1938
5501 Acorn Court	single-family house	1938
5502 Acorn Court	single-family house	1938
5503 Acorn Court	single-family house	1938
5504 Acorn Court	single-family house	1938
5505 Acorn Court	single-family house (model house)	1938
5500 Alba Court	single-family house	1938
5501 Alba Court	single-family house	1938
5502 Alba Court	single-family house	1938
5503 Alba Court	single-family house	1938
5504 Alba Court	single-family house	1938
5505 Alba Court	single-family house	1938
5564 Angle Lane	single-family house	1938
5565 Angle Lane	single-family house	1938
5566 Angle Lane	single-family house	1938
5567 Angle Lane	single-family house	1938
5568 Angle Lane	single-family house	1938
5569 Angle Lane	single-family house	1938
5570 Angle Lane	single-family house	1938
5571 Angle Lane	single-family house	1938
5572 Angle Lane	single-family house	1938
5573 Angle Lane	single-family house	1938
5574 Angle Lane	single-family house	1938
5575 Angle Lane	single-family house	1938
5576 Angle Lane	single-family house	1938
5577 Angle Lane	single-family house	1938
5579 Angle Lane	single-family house	1938
5581 Angle Lane	single-family house	1938
5583 Angle Lane	single-family house	1938
5585 Angle Lane	single-family house	1938
5586 Angle Lane	single-family house	1938
5587-89 Angle Lane	two-unit twin	1938
5588 Angle Lane	single-family house	1938
5590 Angle Lane	single-family house	1938
5591 Angle Lane	single-family house	1938
5592 Angle Lane	single-family house	1938
5593 Angle Lane	single-family house	1938
5594 Angle Lane	single-family house	1938

Address	Building Type	Construction Date
5595 Angle Lane	single-family house	1938
5596 Angle Lane	single-family house	1938
5597 Angle Lane	single-family house	1938
5598 Angle Lane	single-family house	1938
5599 Angle Lane	single-family house	1938
5583-85-87 Apple Court	three-unit row house	1938
5589-91-93 Apple Court	three-unit row house	1938
5590-92 Apple Court	two-unit twin	1938
5594 Apple Court	single-family house	1938
5595 Apple Court	single-family house	1938
5596 Apple Court	single-family house	1938
5597 Apple Court	single-family house	1938
5598 Apple Court	single-family house	1938
5599 Apple Court	single-family house	1938
5589-90-91 Apricot Court	three-unit row house	1938
5592 Apricot Court	single-family house	1938
5593 Apricot Court	single-family house	1938
5594 Apricot Court	single-family house	1938
5595 Apricot Court	single-family house	1938
5596 Apricot Court	single-family house	1938
5597 Apricot Court	single-family house	1938
5598 Apricot Court	single-family house	1938
5599 Apricot Court	single-family house	1938
5600 Apricot Court	single-family house	1938
5601 Apricot Court	single-family house	1938
5602 Apricot Court	single-family house	1938
5603 Apricot Court	single-family house	1938
5604 Apricot Court	single-family house	1938
5605 Apricot Court	single-family house	1938
5606 Apricot Court	single-family house	1938
5607 Apricot Court	single-family house	1938
5608 Apricot Court	single-family house	1938
5609 Apricot Court	single-family house	1938
5610 Apricot Court	single-family house	1938
5611 Apricot Court	single-family house	1938
5612 Apricot Court	single-family house	1938
5613 Apricot Court	single-family house	1938
5589-90-91 Arbutus Court	three-unit row house	1938
5592 Arbutus Court	single-family house	1938
5593 Arbutus Court	single-family house	1938
5594 Arbutus Court	single-family house	1938
5595 Arbutus Court	single-family house	1938
5596 Arbutus Court	single-family house	1938
5597 Arbutus Court	single-family house	1938
5598 Arbutus Court	single-family house	1938
5599 Arbutus Court	single-family house	1938
5601 Arbutus Court	single-family house	1938
5603 Arbutus Court	single-family house	1938

Address	Building Type	Construction Date
5604 Arbutus Court	single-family house	1938
5605 Arbutus Court	single-family house	1938
5606 Arbutus Court	single-family house	1938
5607 Arbutus Court	single-family house	1938
5608 Arbutus Court	single-family house	1938
5609 Arbutus Court	single-family house	1938
5610 Arbutus Court	single-family house	1938
5611 Arbutus Court	single-family house	1938
5612 Arbutus Court	single-family house	1938
5613 Arbutus Court	single-family house	1938
5614 Arbutus Court	single-family house	1938
5615 Arbutus Court	single-family house	1938
5578 Arrowwood Street	single-family house	1938
5579 Arrowwood Street	single-family house	1938
5580 Arrowwood Street	single-family house	1938
5581 Arrowwood Street	single-family house	1938
5582 Arrowwood Street	single-family house	1938
5583 Arrowwood Street	single-family house	1938
5584 Arrowwood Street	single-family house	1938
5585 Arrowwood Street	single-family house	1938
5586 Arrowwood Street	single-family house	1938
5587 Arrowwood Street	single-family house	1938
5588 Arrowwood Street	single-family house	1938
5589 Arrowwood Street	single-family house	1938
5590 Arrowwood Street	single-family house	1938
5591 Arrowwood Street	single-family house	1938
5592 Arrowwood Street	single-family house	1938
5593 Arrowwood Street	single-family house	1938
5594 Arrowwood Street	single-family house	1938
5595 Arrowwood Street	single-family house	1938
5596 Arrowwood Street	single-family house	1938
5597 Arrowwood Street	single-family house	1938
5598 Arrowwood Street	single-family house	1938
5599 Arrowwood Street	single-family house	1938
5500 Avena Court	single-family house	1938
5501 Avena Court	single-family house	1938
5502 Avena Court	single-family house	1938
5503 Avena Court	single-family house	1938
5504 Avena Court	single-family house	1938
5505 Avena Court	single-family house	1938
5579-80-81 Azalea Court	three-unit row house	1938
5582-84-86-88 Azalea Court	four-unit row house	1938
5583-85-87-89 Azalea Court	four-unit row house	1938
5590 Azalea Court	single-family house	1938
5591 Azalea Court	single-family house	1938
5592 Azalea Court	single-family house	1938
5593 Azalea Court	single-family house	1938
5594 Azalea Court	single-family house	1938

Address	Building Type	Construction Date
5595 Azalea Court	single-family house	1938
5596 Azalea Court	single-family house	1938
5598 Azalea Court	single-family house	1938
5601 Azalea Court	single-family house	1938
5600-02-04 Azalea Court	three-unit row house	1938
5603-05-07 Azalea Court	three-unit row house	1938
5608-10-12-14 Azalea Court	four-unit row house	1938
5609-11-13-15 Azalea Court	four-unit row house	1938
5600-02-04-06-08-10 Badger Ct	six-unit row house	1938
5601-03-05-07-09-11 Badger Ct	six-unit row house	1938
5612 Badger Court	single-family house	1938
5613 Badger Court	single-family house	1938
5614 Badger Court	single-family house	1938
5615 Badger Court	single-family house	1938
5616 Badger Court	single-family house	1938
5617 Badger Court	single-family house	1938
5618 Badger Court	single-family house	1938
5619 Badger Court	single-family house	1938
5620 Badger Court	single-family house	1938
5621 Badger Court	single-family house	1938
5576-77 Balsam Court	two-unit twin	1938
5578 Balsam Court	single-family house	1938
5579 Balsam Court	single-family house	1938
5580 Balsam Court	single-family house	1938
5581 Balsam Court	single-family house	1938
5582-84-86 Balsam Ct	three-unit row house	1938
5583-85-87 Balsam Ct	three-unit row house	1938
5588-90-92-94-96-98 Balsam Ct	six-unit row house	1938
5589-91-93-95-97-99 Balsam Ct	six-unit row house	1938
5578 Basswood Street	single-family house	1938
5579 Basswood Street	single-family house	1938
5580 Basswood Street	single-family house	1938
5581 Basswood Street	single-family house	1938
5582 Basswood Street	single-family house	1938
5583 Basswood Street	single-family house	1938
5584 Basswood Street	single-family house	1938
5585 Basswood Street	single-family house	1938
5586 Basswood Street	single-family house	1938
5587 Basswood Street	single-family house	1938
5588-90 Basswood Street	two-unit twin	1938
5589-91 Basswood Street	two-unit twin	1938
5592-94 Basswood Street	two-unit twin	1938
5593-95 Basswood Street	two-unit twin	1938
5596-98 Basswood Street	two-unit twin	1938
5597-99 Basswood Street	two-unit twin	1938
5600-02-04-06-08-10 Beaver Ct	six-unit row house	1938
5601-03-05-07-09-11 Beaver Ct	six-unit row house	1938
5612 Beaver Court	single-family house	1938

Address	Building Type	Construction Date
5613 Beaver Court	single-family house	1938
5614 Beaver Court	single-family house	1938
5615 Beaver Court	single-family house	1938
5616 Beaver Court	single-family house	1938
5617 Beaver Court	single-family house	1938
5618 Beaver Court	single-family house	1938
5619 Beaver Court	single-family house	1938
5620 Beaver Court	single-family house	1938
5621 Beaver Court	single-family house	1938
5622 Beaver Court	single-family house	1938
5623 Beaver Court	single-family house	1938
5600-02-04-06-08-10 Berry Ct	six-unit row house	1938
5601-03-05-07-09-11 Berry Ct	six-unit row house	1938
5612 Berry Court	single-family house	1938
5613 Berry Court	single-family house	1938
5614 Berry Court	single-family house	1938
5615 Berry Court	single-family house	1938
5616 Berry Court	single-family house	1938
5617 Berry Court	single-family house	1938
5618 Berry Court	single-family house	1938
5619 Berry Court	single-family house	1938
5620 Berry Court	single-family house	1938
5621 Berry Court	single-family house	1938
6395 Blossom Court	single-family house	1938
6396 Blossom Court	single-family house	1938
6397 Blossom Court	single-family house	1938
6398 Blossom Court	single-family house	1938
6399 Blossom Court	single-family house	1938
6400 Blossom Court	single-family house	1938
6401 Blossom Court	single-family house	1938
6402-04 Blossom Court	two-unit twin	1938
6403-05 Blossom Court	two-unit twin	1938
6406-07 Blossom Court	two-unit twin	1938
5592 Bluebird Court	single-family house	1938
5593 Bluebird Court	single-family house	1938
5594-96 Bluebird Court	two-unit twin	1938
5595-97 Bluebird Court	two-unit twin	1938
5598 Bluebird Court	single-family house	1938
5599 Bluebird Court	single-family house	1938
5600-02-04-06-08-10 Bramble Ct	six-unit row house	1938
5601-03-05-07-09-11 Bramble Ct	six-unit row house	1938
5601 Broad Street	Greendale Tavern	1938
5621-23 Broad Street	Old U. S. Post Office	1938
5583-84-85 Butternut Court	three-unit row house	1938
5586 Butternut Court	single-family house	1938
5587 Butternut Court	single-family house	1938
5588-90-92-94-96-98 Butternut Ct	six-unit row house	1938
5589-91-93-95-97-99 Butternut Ct	six-unit row house	1938

Address	Building Type	Construction Date
5692-94-96-98 Cardinal Court	four-unit row house	1938
5693-95-97-99 Cardinal Court	four-unit row house	1938
5700-02-04-06-08-10 Cardinal Ct	six-unit row house	1938
5701-03-05-07-09-11 Cardinal Ct	six-unit row house	1938
5700-02-04-06 Carnation Court	four-unit row house	1938
5701-03-05-07 Carnation Court	four-unit row house	1938
5708 Carnation Court	single-family house	1938
5709 Carnation Court	single-family house	1938
5710 Carnation Court	single-family house	1938
5711 Carnation Court	single-family house	1938
6300 Catalpa Street	single-family house	1946
6305 Catalpa Street	single-family house	1949
6310 Catalpa St	single-family house	1948
5700-02 Clover Lane	two-unit twin	1938
5701-03 Clover Lane	two-unit twin	1938
5704-06 Clover Lane	two-unit twin	1938
5705-07 Clover Lane	two-unit twin	1938
5708 Clover Lane	single-family house	1938
5709 Clover Lane	single-family house	1938
5711 Clover Lane	single-family house	1938
5713 Clover Lane	single-family house	1938
5714 Clover Lane	single-family house	1938
5715 Clover Lane	single-family house	1938
5716 Clover Lane	single-family house	1938
5717 Clover Lane	single-family house	1938
5718 Clover Lane	single-family house	1938
5719 Clover Lane	single-family house	1938
5720 Clover Lane	single-family house	1938
5721 Clover Lane	single-family house	1938
5722 Clover Lane	single-family house	1938
5723 Clover Lane	single-family house	1938
5724 Clover Lane	single-family house	1938
5725 Clover Lane	single-family house	1938
5726 Clover Lane	single-family house	1938
5727 Clover Lane	single-family house	1938
5728 Clover Lane	single-family house	1938
5729 Clover Lane	single-family house	1938
5730 Clover Lane	single-family house	1938
5731 Clover Lane	single-family house	1938
5732 Clover Lane	single-family house	1938
5734 Clover Lane	single-family house	1938
5900 Clover Lane	single-family house	1952
5901 Clover Lane	single-family house	1951
5910 Clover Lane	single-family house	1949
6004 Clover Lane	single-family house	1949
6005 Clover Lane	single-family house	1952
6012 Clover Lane	single-family house	1950
6016 Clover Lane	single-family house	1948

Address	Building Type	Construction Date
5900 Cornflower Lane[45]	single-family house	1948
5901 Cornflower Lane	single-family house	1947
5905 Cornflower Lane	single-family house	1947
5908 Cornflower Lane	single-family house	1952
5909 Cornflower Lane	single-family house	1947
5916 Cornflower Lane	single-family house	1951
6392-94 Conifer Lane	two-unit twin	1938
6396-98 Conifer Lane	two-unit twin	1938
6400-02 Conifer Lane	two-unit twin	1938
6404-06 Conifer Lane	two-unit twin	1938
6700 Conifer Lane	single-family house	1938
6701 Conifer Lane	single-family house	1938
6702 Conifer Lane	single-family house	1938
6703 Conifer Lane	single-family house	1938
6704 Conifer Lane	single-family house	1938
6705 Conifer Lane	single-family house	1938
6706 Conifer Lane	single-family house	1938
6707 Conifer Lane	single-family house	1938
6400 Crocus Court	single-family house	1938
6401 Crocus Court	single-family house	1938
6402 Crocus Court	single-family house	1938
6403 Crocus Court	single-family house	1938
6404 Crocus Court	single-family house	1938
6405 Crocus Court	single-family house	1938
5808 Currant Lane	single-family house	1938
5810 Currant Lane	single-family house	1938
5812 Currant Lane	single-family house	1938
5814 Currant Lane	single-family house	1938
5816 Currant Lane	single-family house	1938
5818 Currant Lane	single-family house	1938
5900 Currant Lane	single-family house	1938
5904 Currant Lane	single-family house	1938
5908 Currant Lane	single-family house	1938
5912 Currant Lane	single-family house	1938
5913-15 Currant Lane	two-unit twin	1938
5914 Currant Lane	single-family house	1938
5916 Currant Lane	single-family house	1938
5917-19 Currant Lane	two-unit twin	1938
5918 Currant Lane	single-family house	1938
5920 Currant Lane	single-family house	1938
5921 Currant Lane	single-family house	1938
5800-02 Dale Lane	two-unit twin	1938
5801-03-05-07 Dale Lane	four-unit row house	1938
5808-10 Dale Lane	two-unit twin	1938
5809-11-13-15 Dale Lane	four-unit row house	1938
5814 Dale Lane	single-family house	1938

[45] "Winning Home Creating Problem;" *Greendale: 50 years*, p. 51.

Address	Building Type	Construction Date
5816-18 Dale Lane	two-unit twin	1938
5817-19-21-23 Dale Lane	four-unit row house	1938
5820-22 Dale Lane	two-unit twin	1938
5900-02 Dale Lane	two-unit twin	1938
5901-03-05-07 Dale Lane	four-unit row house	1938
5908-10 Dale Lane	two-unit twin	1938
5909-11-13-15 Dale Lane	four-unit row house	1938
5912-14 Dale Lane	two-unit twin	1938
5916-18 Dale Lane	two-unit twin	1938
5917-19-21-23 Dale Lane	four-unit row house	1938
5920 Dale Lane	single-family house	1938
5808-10-12-14 Dendron Lane	four-unit row house	1938
5813-15-17-19-21-23 Dendron Lane	six-unit row house	1938
5816-18-20-22 Dendron Lane	four-unit row house	1938
5900-02-04-06 Dendron Lane	four-unit row house	1938
5901-03-05-07 Dendron Lane	four-unit row house	1938
5908-10-12-14 Dendron Lane	four-unit row house	1938
5909-11-13-15 Dendron Lane	four-unit row house	1938
5916-18-20-22 Dendron Lane	four-unit row house	1938
5917-19-21-23 Dendron Lane	four-unit row house	1938
6801 West Grange Avenue	single-family house	1938
6803 West Grange Avenue	single-family house	1938
6901 West Grange Avenue	single-family house	1938
6903 West Grange Avenue	single-family house	1938
7001 West Grange Avenue	single-family house	1938
7003 West Grange Avenue	single-family house	1938
7005 West Grange Avenue	single-family house	1938
7007 West Grange Avenue	single-family house	1938
5586-88 Municipal Square	two-unit twin	1938
5587-89 Municipal Square	two-unit twin	1938
5590 Municipal Square	single-family house	1938
5591 Municipal Square	single-family house	1938
5592-94 Municipal Square	two-unit twin	1938
5593-95 Municipal Square	two-unit twin	1938
5596-98 Municipal Square	two-unit twin	1938
5597-99 Municipal Square	two-unit twin	1938
6500 Northway	Greendale Village Hall	1938
6800-02 Northway	two-unit twin	1938
6804-06 Northway	two-unit twin	1938
6808-10 Northway	two-unit twin	1938
6809-11 Northway	two-unit twin	1938
6812-14 Northway	two-unit twin	1938
Schoolway and Broad Street	Flagpole Sculpture	1939
6300 Schoolway	single-family house	1938
6302 Schoolway	single-family house	1938
6304 Schoolway	single-family house	1938
6306 Schoolway	single-family house	1938
6308 Schoolway	single-family house	1938

Address	Building Type	Construction Date
6310 Schoolway	single-family house	1938
6312 Schoolway	single-family house	1938
6314 Schoolway	single-family house	1938
6315 Schoolway	single-family house	1938
6316 Schoolway	single-family house	1938
6317 Schoolway	single-family house	1938
6318 Schoolway	single-family house	1938
6319 Schoolway	single-family house	1938
6320 Schoolway	single-family house	1938
6321 Schoolway	single-family house	1938
6322 Schoolway	single-family house	1938
6323 Schoolway	single-family house	1938
6324-26 Schoolway	two-unit twin	1938
6325-27 Schoolway	two-unit twin	1938
6600 Schoolway	Greendale Police and Fire Station	1938
6700 Schoolway	Greendale Public Works Building	1938

NONCONTRIBUTING RESOURCES: INVENTORY

Address	Name	Construction Date
5584 Angle Lane	single-family house	1958
5647 Broad Street	Stores Block	1938(altered)
5602-90 Broad Street	shopping center (2 buildings)	1958 (altered)
5627-37 Broad Street	Greendale Theater Block	1938 (altered)
5651 Broad Street	Wisconsin Savings and Loan	1970
c. 5700 Broad Street	gazebo	1995
5711 Broad Street	Sentry Food Store	1965
5741 Broad Street	United States Post Office	1965
5800-08 Broad Street	pharmacy and dentist's office	1966
5850 Broad Street	Layton Bank	1971
5900-02 Broad Street	two-unit row house	1967
5908-10 Broad Street	two-unit row house	1967
6301 Catalpa Street	single-family house	1947, c 2009 (altered)
6304 Catalpa Street	single-family house	1954
6309 Catalpa Street	single-family house	1953
6391 Catalpa Sts.	single-family house	1950 (altered)
5712 Clover Lane	single-family house	c. 1955
5905 Clover Lane	single-family house	1956
5906 Clover Lane	single-family house	1953
5909 Clover Lane	single-family house	1953
5913 Clover Lane	single-family house	1948 (altered)
6008 Clover Lane	single-family house	1950 (altered)
6015 Clover Lane	Greendale Community Church	1953 (additions 1957, 1962, 1968, 1979)
6020 Clover Lane	single-family house	1954
Clover Lane at Dale Creek	Clover Lane Bridge	c. 2000
6389 Conifer Lane	single-family house	1949 (altered)
5904 Cornflower Lane	single-family house	1951 (altered)
5912 Cornflower Lane	single-family house	1947 (altered)
5913 Cornflower Lane	single-family house	1949 (altered)
5917 Cornflower Lane	single-family house	1946 (altered)
Dale Creek Park	pedestrian bridge	1998
700 Enfield Avenue	Canterbury Grade School	1965
6601 Northway	Greendale Cooperative Service Station	1938, c. 1965
6705 Northway	St. Luke's Lutheran Church	1962
6755-57-59 Northway	Northway Apartment Complex (3 buildings)	1963
Northway at Dale Creek	Northway Bridge	c. 2000
6800 Schoolway	Greendale Community Center and School	1938/70/97 (altered)
Schoolway at Dale Creek	Schoolway Bridge	c. 2000
6777 W Grange Ave	single-family house	1956
6771 W Grange Ave	single-family house	1957
6799 W Grange Avenue	single-family house	1960

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:	1 and 4
NHL Theme(s):	I. Peopling Places 4. Community and Neighborhood III. Expressing Cultural Values 5. Architecture, Landscape Architecture, and Urban Planning
Areas of Significance:	Community Planning and Development; Politics/Government; Architecture; Landscape Architecture
Period(s) of Significance:	1936–1952
Significant Dates:	1936–38
Significant Person(s):	N/A
Cultural Affiliation:	N/A
Architect/Builder:	Peets, Elbert (Chief Planner); Crane, Jacob L. (Planner); Bentley, Harry H. and Thomas, Walter G. (Architects); Stein, Clarence (Consultant); Bauer, Catherine (Consultant); Black, Russell Van Nest (Consultant)
Historic Contexts:	XVI. Architecture W. Regional and Urban Planning VII. Political and Military Affairs, 1865–1939 H. The Great Depression and the New Deal, 1929–41 XXXI. Social and Humanitarian Movements A. Communitarianism and Utopianism XXX. American Ways of Life H. Suburban Life

SUMMARY STATEMENT OF SIGNIFICANCE

The Village of Greendale represents highly important aspects of New Deal policy, an important stage in the evolution of the American suburb, and pioneering innovations in house and neighborhood design. An adaptation of American garden-city planning to the climate, topography, and cultural preferences of the midwestern United States, the Village of Greendale meets NHL Criteria 1 and 4 under the NHL themes, Peopling Places (community and neighborhood) and Expressing Cultural Values (architecture, landscape architecture, and urban planning). As one of the three New Deal greenbelt towns built by the Resettlement Administration's Division of Suburban Resettlement, it is nationally significant under NHL Criterion 1 for its association with highly significant activities that shaped the Federal response to the Great Depression by providing economic relief in the form of employment for skilled and unskilled labor and making use of modern principles of design and lower-cost methods and materials of home construction in an effort to stimulate the building industry and raise the quality of life for working-class Americans. The village meets NHL Criterion 4 for its artistic merit and outstanding representation of the American Garden City movement, the widely acclaimed Neighborhood Unit Plan, and the innovative, cost-saving measures of group housing and large-scale home construction. Originally built as a demonstration of garden-city planning and a model suburb for lower-income Americans, the Village of Greendale is a nationally significant historic residential suburb as defined in the nationwide Historic Residential Suburbs in the United States, 1830 to 1960, Multiple Property Submission (MPS). The original section of Greendale retains a high degree of integrity of location, setting, design, workmanship, materials, feeling, and association.

The Suburban Resettlement program and the design of Greendale reflect maturing ideas about American town planning, as well as government-supported efforts to provide employment, stimulate the building economy, and, in doing so, demonstrate fundamental improvements to the quality of housing and community life for working-class Americans. This program was fueled by an optimism that social problems could be remedied and urban blight eliminated through the planning and design of safe, healthy, and affordable communities set apart from the center city. It was also based on the possibilities that economies of scale, new materials, and new approaches to design offered in reducing the cost of construction. Such planning entailed regional and community planning, the careful selection of a decentralized site with transportation access to employment and recreational areas, the large-scale development of efficient modern homes using new materials and methods of construction, and the arrangement of street, pedestrian pathways, housing, and community buildings to form a spacious and healthy village environment.

Greendale and the other greenbelt towns exemplify the goals of the New Deal, not only as models of scientifically and aesthetically planned communities, but as responses to the desperate unemployment and housing crises of the era. Finally, the greenbelt towns represent social, economic, and political experimentation unparalleled in American history. The Federal government built and retained ownership of each town, yet encouraged the residents to govern themselves and to work together through cooperative associations to establish and operate the town's businesses and institutions. Planned and constructed in a relatively brief and unprecedented period of government sponsorship, Greendale and the other greenbelt towns made a bold statement about community planning and presented a radical challenge to the individualistic capitalism and entrepreneurism that characterized American society, traditional patterns of growth, and the home-building industry.

Greendale was built as a model suburb for lower-income Americans and a demonstration of American garden-city planning and large-scale home building. It reflects the collaboration of Midwestern town planners, Elbert Peets and Jacob L. Crane; principal architect for residential buildings Harry H. Bentley; and principal architect for the commercial and institutional buildings, Walter G. Thomas. Together the four designers headed a collaborative team of more than 100 persons who helped design Greendale (Figure 24). Greendale's design

team interpreted garden-city principles and American planning traditions, modified by environmental conditions and target population preferences, to create a community with an innovative site plan that safely accommodated the automobile while conserving natural features, and that incorporated abundant parks, and high-quality housing that was modern yet economical in layout and materials.

Greendale reflects the influence of the 1931 President's Conference on Home Building and Home Ownership, advances in professional theories for home construction and community planning, and the development of national standards for subdivision design, large-scale development housing, and community enhancement. The community represents one of the most comprehensive New Deal housing programs and reflects one of several alternatives for deterring urban blight and solving the nation's shortage of low-cost housing. The 1930s represented a brief but intense period of experimentation in which the Federal government assumed leadership for promoting community development and housing reform in suburban, rural, and urban areas of the country. Other New Deal housing programs included the small house and large-scale rental housing programs of the Federal Housing Administration (est. 1934), Housing Division of the Public Works Administration (1933–1935), Federal Home Loan Administration, Subsistence Homestead Division of the Public Works Administration (1933–1935), United States Housing Authority (est. 1938), Tennessee Valley Authority (est. 1933), Reconstruction Finance Corporation, and the Resettlement Administration's Rural Resettlement program (1935–1944). A Central Housing Committee was established in 1935 within the National Resources Planning Board to coordinate the activities of the various housing agencies.

PEOPLING PLACES: THE GREENBELT TOWN PROGRAM AND THE DEVELOPMENT OF GREENDALE

The greenbelt town program was unique among the Federal initiatives undertaken during the Depression and was intended to address three major problems worsened by the economic conditions of the era: widespread unemployment, expanding urban slums, and the shortage of decent housing.

The economic collapse of the Depression found 14 million Americans out of work and 4 million families receiving public assistance by 1933. Some 273,000 families would lose their homes to foreclosure that year. The building industry was especially hard hit as one-third of the unemployed had worked in the building trades. Housing construction fell to one-tenth of its 1925 figure, exacerbating a pre-existing housing shortage and forcing the urban poor and the rural migrants, drawn to cities in search of work, to crowd into the deteriorated housing in city slums. Franklin Delano Roosevelt, swept into office with his pledge of economic recovery, was inaugurated in March 1933. Within the first few months of Roosevelt's New Deal administration, Congress had enacted the National Industrial Recovery Act and the Agricultural Adjustment Act. The creation of the Federal Emergency Relief Administration, the Civilian Conservation Corps, the Tennessee Valley Authority and the Subsistence Homesteads Development Division, among others, followed.[46] The purpose of these agencies and programs was perhaps best articulated by Harold L. Ickes, Secretary of the Interior and director of the Federal Emergency Administration of Public Works (PWA), who stated, "Our business is to put men to work, to do it quickly, and to do it intelligently."[47]

Historically, the Federal government had only intervened in the housing market during wartime, but the desperate situation encouraged the President to support Federal initiatives that would build housing, raze slums and otherwise improve living conditions for the 63 percent of the population that was considered low-income

[46] Robinson & Associates, Inc. and Jeffrey Shrimpton, "Historic Context: Public Housing in the United States, 1933-1949," Draft Report Prepared for the U.S. Department of Housing and Urban Development and the U.S. Department of the Interior, National Park Service, National Register, 14 August 1997, p. 19; Gwendolyn Wright, *Building the Dream: A Social History of Housing in America,* (Cambridge: M.I.T. Press, 1983), p. 220.

[47] Harold Ickes, "Public Works in the New Deal," *Architectural Forum* 59 (September 1933): 151.

(making less than $1,500 annually). The Subsistence Homesteads Development Division relocated farm families from depressed areas to experimental agricultural communities, such as the Matanuska Valley (Alaska) Colony. Jobless industrial workers were resettled in government-created rural towns such as Arthurdale, West Virginia (for former coal miners), Aberdeen Gardens, Virginia (for African American families), and Jersey Homesteads, New Jersey (for Jewish garment workers), where residents could supplement farming with part-time employment in a cooperative factory. The PWA, through its short-lived Housing Division, bought land in urban slums, cleared each site, and attempted to build new, low-cost housing; headed by RPAA architect Robert Kohn, this program resulted in the nation's first low-income public housing developments such as Carl Mackley Homes in Philadelphia, Lockefield Gardens in Indianapolis, Hillside Homes (designed by C. Stein) in New York City, and Techwood Homes in Atlanta, Georgia. However, acquiring urban parcels proved expensive and time-consuming. Ultimately, very little public housing was built.[48] The Housing Division was dismantled in 1935, and the dialogue over how to fund housing for the nation's poorest groups continued until 1937 when the Wagner Act established a program of Federal funding for housing projects carried out by local housing authorities.

In February 1935, Rexford Guy Tugwell (1891-1979), then Undersecretary of Agriculture, approached John Lansill, the director of the Land Utilization Division of the Federal Emergency Relief Administration, about acquiring 15,000 acres of sub-marginal land adjacent to the National Agricultural Research Station at Beltsville, Maryland, not far from Washington D.C. Tugwell, an agricultural economist who had left Columbia University to advise Roosevelt as a member of his "Brain Trust," proposed to reclaim the land for reforestation and recreation and possibly build a town for employees of the research station on the site. Reputedly the most radical of Roosevelt's advisors, Tugwell was an outspoken proponent of land use reform and the cooperatives movement. Tugwell held a realistic view of the hardships of farm life and did not see relocating the urban poor to farms as the solution to their poverty. He was also familiar with contemporary ideas in urban and regional planning, such as that of the self-supporting, decentralized garden city promoted by members of the Regional Planning Association of America (RPAA). Tugwell saw the garden city as the solution to several of the problems confronting the nation. In the short run, building the new town would create hundreds of jobs. In the long run, the satellite community would provide jobs and decent housing for the poor in a suburban setting, surrounded by a greenbelt of farms and parkland, with municipal governance and businesses operated by consumer cooperatives. In addition, the town would illustrate the benefits of community planning, and serve as a counterpoint to the low-quality subdivisions and speculative land purchasing that was causing urban blight and spreading outward from the cities. Lansill endorsed Tugwell's proposal and the Federal Emergency Relief Administration began securing options on the land at Beltsville (Berwyn, Maryland) in March 1935.[49]

On April 8, 1935, Congress enacted the Emergency Relief Appropriations Act, providing over $4 billion (the largest single appropriation in American history) for public works projects that would provide work for the unemployed. The President was given the authority to allocate the funds, sparking a competition among the various Federal agencies for a share of the monies. Tugwell pitched his idea for a new town at Beltsville, Maryland to the President. Roosevelt, a firm believer in the benefits of country living, responded so enthusiastically, Tugwell expanded his proposal to encompass the construction of new towns outside large industrial cities across the nation.[50] This was the genesis of the greenbelt town program. Tugwell later stated:

[48] Wright, *Building the Dream*, pp. 220-22.

[49] Alanen and Eden, pp. 3-5; Joseph L. Arnold, *The New Deal in the Suburbs: A History of the Greenbelt Town Program, 1935-1954*, (Columbus, Ohio: Ohio State University Press, 1971), p. 31; Elizabeth Jo Lampl, "Greenbelt NHL Nomination," 22 March 1996, pp. 25-26.

[50] Arnold, p. 31; Alanen and Eden, p. 5; Lampl, p. 26.

"My idea [was] to go just outside centers of population, pick up cheap land, build a whole community, and entice people into it. Then go back into the cities and tear down whole slums and make parks of them."[51]

To facilitate the greenbelt town program, Roosevelt and Tugwell created the Resettlement Administration (RA), authorized by Executive Order 7027, signed by Roosevelt on April 30, 1935.[52] Tugwell was made director of the new agency, and several existing rehabilitation and conservation programs were transferred to it, including the Subsistence Homesteads Development Division. Within the RA, Tugwell immediately organized the Suburban Resettlement Division (SRD), appointed John Lansill director, and charged the division with the task of developing the greenbelt town program. The executive order gave the RA the power to "administer approved projects including resettlement of destitute or low-income families from rural and urban areas, including the establishment, maintenance, and operation in such connection, of communities in rural and suburban areas."[53]

Plans for the greenbelt town program evolved over the summer of 1935, guided by four men: John Lansill; Warren J. Vinton, economist and chief of SRD's Research Section; Frederick J. Bigger, an architect and planner who was a former member of the RPAA and had been tapped to provide a designer's perspective; and Tugwell himself, who convened a panel of distinguished experts such as Ernest J. Bohn, president of the National Association of Housing Officials; educator John Dewey; and economist Stuart Chase as well as representatives of disciplines such as child care and social work.[54]

The greenbelt town program placed major emphasis on suburban land-planning, large-scale construction, and the safety issues posed by increasing automobile ownership. Warren Vinton wrote:

> We stand on the threshold of all the new potentialities of large-scale planned developments. Great and extraordinary congestion on the land is no longer a necessity; rapid transit and the automobile have made possible an almost indefinite expansion of metropolitan areas. Housing may now, more easily than in the past, be located in open spaces, affording ample fresh air, sunlight, and areas for recreation. With the automobile there has come a necessity for changed types of urban land planning. New and even radical innovations are in the offing, such as superblocks, open spaces penetrating housing areas, and the complete separation of pedestrian and vehicular traffic. The three great Greenbelt towns now being built by the Resettlement Administration of the Department of Agriculture are experiments in these new and modern techniques of land planning.[55]

Vinton and the staff of the SRD's Research Section studied 100 major industrial cities to determine where to locate greenbelt towns. The principal criteria used in selecting these cities were a stable and diverse manufacturing sector, inexpensive land available on the outskirts of the city, and a progressive political climate likely to support public works. Twenty-five cities met these criteria. Further consideration narrowed the list to

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[51] Stanley Buder, Visionaries and Planners: The Garden City Movement and the Modern Community (New York: Oxford University Press, 1990), p. 176.

[52] Lampl, pp. 24-25, quotes Tugwell's diary as reading, "The President and I between us invented the RA."

[53] Executive Order No. 7027, 30 April 1935, reprinted in U.S. Resettlement Administration, *First Annual Report, 1936*, (Washington, D.C.: U. S. Government Printing Office, 1936), pp. 1-2.

[54] Alanen and Eden, pp. 6-8. The authors relied heavily on an unpublished report of the program prepared by Henry Churchill, John S. Lansill Papers, University of Kentucky Special Collections, Lexington, Kentucky.

[55] Vinton, Warren Jay. "A Survey of Approaches to the Housing Problem," *Annals of the American Academy of Political and Social Science* 190, Current Developments in Housing (March 1937), p. 12. This article encourages large-scale housing operations. Vinton was formerly director of his own development company in Detroit.

eight: St. Louis, Missouri; Cincinnati, Ohio; Milwaukee, Wisconsin; Chicago, Illinois; New Brunswick, New Jersey; Dayton, Ohio; Chattanooga, Tennessee; and Washington, D.C. [56]

Meanwhile, Frederick Bigger had brought in housing expert Catherine Bauer and several planning consultants, many of whom were experienced in garden-city planning or were RPAA members, including Henry Wright, Clarence Stein, Tracy Augur, Earle Draper, John Nolen and Jacob Crane. These individuals convinced Lansill that the quality of the design was crucial and should not be left to engineers (which Tugwell had done initially, with predictably unimaginative results). Through their influence, Tugwell was persuaded to refocus the program with the purpose of creating four state-of-the-art greenbelt towns that would serve as models of community planning.[57]

On September 12, 1935, President Roosevelt allocated $31 million to the RA for the greenbelt town program, with the implication that an additional $38 million might be granted in the future. The smaller-than-hoped-for budget was encumbered with the requirements that all the land for the towns must be purchased by December 15, 1935 and that the towns must be completed by June 30, 1936. By November 1, 1935, the locations selected for the four greenbelt towns were Washington, D.C. (Greenbelt, Maryland); Cincinnati, Ohio (Greenhills); New Brunswick, New Jersey (Greenbrook, which was dropped in May 1936 as the result of a pending law suit); and Milwaukee, Wisconsin (Greendale).[58]

In October 1935, Bigger was named Chief of Planning for the SRD. With the assistance of the prominent urban planner John Nolen, Bigger selected a team of planners, architects, engineers and other staff for each town.[59] Shortly after his appointment Bigger articulated the purpose of the greenbelt town program, as follows:

(a) To secure a large tract of land, and thus avoid the complications ordinarily due to diverse ownerships; in this tract to create a community, protected by an encircling green belt; the community to be designed for families of predominantly modest income, and arranged and administered (managed) so as to encourage that kind of family and community life which will be better than they now enjoy, but which will not involve subjecting them to coercion or theoretical and untested discipline; the dwellings and the land upon which they are located to be held in one ownership, preferably a corporate entity to which the Federal Government will transfer title, and which entity or corporation will rent or lease the dwellings but will not sell them; a municipal government to be set up in character with such governments now existing or possible in that region; coordination to be established, in relation to the local and state governments, so that there may be provided those public services of educational and other character which the community will require; and, finally, to accomplish these purposes in such a way that the community may be a tax paying participant in the region, that extravagant outlays from the individual family income will not be a necessity, and that the rents will be suitable to families of modest income.

(b) To develop a land use plan for the entire tract; to devise, under the direction of the Administrator, a system of rural economy coordinated with the land use plan for the rural portions of the tract surrounding the Suburban community; and to integrate both the physical plans and the economies of the rural area and the Suburban community.[60]

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[56] Alanen and Eden, p. 12; Arnold, p. 39.
[57] Alanen and Eden, p. 7.
[58] Arnold, p. 43.
[59] Alanen, p. 7.
[60] Arnold, pp. 84-85; reproduced from U.S. Resettlement Administration, *Greenbelt Towns: A Demonstration in Suburban Planning*, (Washington, D.C.: U.S. Government Printing Office, 1936), p. 1.

The RA's suburban resettlement program was conceived as an adjunct to the rural resettlement program that had begun as the Subsistence Homestead Program under Ickes's PWA program. As many of the Federal housing initiatives, the impetus for this program came from the 1931 President's conference, specifically, the recommendations of the Committee on Farm and Village Housing, which had closely examined the living conditions of the nation's rural population and called attention to the need for immediate reform. The committee identified the need for the development of housing standards within reach of different groups of people in rural villages—standards that considered the type of architecture, the structural plan, and the methods of financing and reflected the "growing interest in village planning for individual comfort and social efficiency." These common considerations justified the extension of the agency's work into the area of suburban resettlement according to E. L. Kirkpatrick, the professor of rural sociology who was a member of the committee in 1931 and became the assistant regional director for the RA's Midwest office.[61]

Following Tugwell's departure, the program redefined its focus, dropping the more controversial aspects of cooperative land use and linking it instead to the more popular programs of the Federal Housing Administration (established 1934), which offered mortgage insurance and technical assistance for new privately financed and constructed subdivisions. As Kirkpatrick explained in 1937:

> Suburban Resettlement is trying to demonstrate a feasible method of providing adequate low-rental or reasonable—cost dwellings in home-like surroundings. It is attempting to show that urban workers as well as farmers have access to homes that are equipped with the essentials for healthful and satisfactory living. In doing this, it hopes to 'open a new road for America's builders and money lending institutions.'[62]

Although short-lived and falling short of the RA's original ideal, the greenbelt town program succeeded in creating three model communities, planned and built with Federal relief funds and labor in the course of a three-year period. These communities took form at a time when numerous Federal programs were seeking ways to stimulate the building industry, put people to work, stave off urban blight, provide a template for healthy and safe communities, and control future urban growth through land-use planning. Taken together the greenbelt towns provide an ideal of neighborhood planning, garden-city design, and low-cost housing design that was endorsed by the Federal government, with the input of some of the nation's leading planners and designers, as a model for future town planning and suburban development. Viewed individually, each of the three towns is a unique and enduring record of 1930s ideas about land-use planning, highly important advances in the housing field, and the interdisciplinary collaboration of some of the nation's finest designers and most forward-looking theorists.

Greendale: Origin and Progress

Milwaukee owed its selection as the location of a greenbelt town project to a variety of factors. It had a multi-faceted and steadily-growing industrial base. On the western fringe of Milwaukee lay hundreds of acres of rich agricultural land that could be acquired economically. Enthusiastic support for the greenbelt town project seemed assured in a city famed for its socialist politics. The German-American character of the city was another point in its favor because, as one report contended, Germanic peoples are known for their industriousness, their thrift, and their love of music, art, drama and horticulture. Milwaukee's greatest advantage may have been its demonstrated interest in public housing and planning. Milwaukee had been among the first cities in the U.S. to help finance a public housing project (Garden Homes, 1923, NR), and the current reformist government, headed by popular socialist Mayor Daniel W. Hoan, was already working with Harold Ickes' agency, the PWA, to erect

[61] E. L. Kirkpatrick, "Housing Aspects of Resettlement," *Annals of the American Academy of Political and Social Science* 190, Current Developments in Housing (March 1937), pp. 98-99.

[62] Ibid., p. 99; the inner quotation comes from RA, *Greenbelt Towns*.

another Federally-assisted public housing project (Parklawn). In addition, Milwaukee County had enacted one of the nation's first county-wide zoning ordinances in 1927. As it turned out, the RA encountered less opposition in Milwaukee than in any other city, perhaps because RA officials met with Mayor Hoan and other local officials early in the project to explain the program and enlist their support. The Milwaukee Real Estate Board and several local building and loan companies grumbled about Federal intervention in the private sector and in August 1936, following the successful suit that ended the Greenbrook project in New Jersey, filed a complaint in the U.S. District Court in Washington, but the case was never argued. Articles about the project in the local newspaper, the *Milwaukee Journal*, were predominantly favorable. The most ardent supporters of the project were organized labor and the Wisconsin Progressives, led by Governor Philip F. La Follette and his brother, U.S. Senator Robert M. La Follette (sons of former U.S. Senator Robert "Fighting Bob" La Follette).[63]

Harold Gelnaw, a Washington-based real estate broker, had begun optioning land in southwestern Milwaukee County for the RA in August 1935. Faced with a number of resistant landowners and a deadline of November 20 for securing all the options, Gelnaw resorted to threatening condemnation and planting the rumor that the land was needed for a munitions factory. By December 1935, when purchasing began, Gelnaw had optioned 10,760 acres. The RA eventually bought 3,410 acres at a total cost of $1.2 million, making the average price per acre $372, about $100 more per acre than at Greenhills, and $200 more per acre than at Greenbelt.[64]

Each greenbelt town project had its own design team. Greendale's staff was led by Elbert Peets (chief planner), Jacob Crane (planner), Harry H. Bentley (principal architect, residential buildings), and Walter G. Thomas (principal architect, commercial and institutional buildings). Over 100 people were a part of the Greendale team including support personnel and consultants in diverse fields such as wildlife management, real estate analysis and agricultural practices. The consultants included Clarence Stein (on real estate economics), Catherine Bauer (on housing), and Russell van Nest (on planning). The Greendale team was headquartered with the other project teams in the Washington mansion of socialite Evalyn Walsh McLean (Figure 24). The Greendale project opened a local office in Madison, directed by Fred C. Naumer. The field research for the project, including topographic surveys and social research on blue-collar families in Milwaukee, were carried out from the Madison office.[65]

Elbert Peets (1886–1968), Greendale's chief planner, brought an especially varied expertise to the Greendale project, one that is best classified as landscape architecture and extended from urban forestry to the design of civic centers and subdivisions. He was born in Hudson, Ohio, and worked in landscape design before attending Western Reserve University, from which he graduated in 1912. Peets pursued graduate studies at Harvard University, finishing with a master's degree in landscape architecture in 1915. In his early career he worked with noted Cleveland estate designer H. U. Horvath and the Boston firm of Pray, Hubbard and White, where he worked on residential subdivisions. For many years, Peets worked with the distinguished German city planner, Werner Hegemann, who maintained offices in New York City and Milwaukee, Wisconsin. Hegemann and Peets prepared initial plans for the company town of Kohler, Wisconsin in 1916 (later modified by Frederick Law Olmsted, Jr.); designed Washington Highlands, a garden suburb for upper middle-class residents near Milwaukee (1916, NRHP); and Wyomissing Park, a residential development outside of Reading, Pennsylvania (1917–21). The two co-authored an influential book on civic design, published in 1922 and entitled, *The American Vitruvius: An Architect's Handbook of Civic Art*. Hegemann soon after returned to Germany, ending his collaboration with Peets. Peets traveled in Europe, gaining an understanding of the historical evolution of city planning, and then opened a landscape architecture office in Cleveland, Ohio. Peets practiced in Cleveland through most of the 1920s and 1930s. Peets was extremely skilled in European Renaissance and Colonial American community-planning principles, and had written an essay on Pierre de L'Enfant's plan of the nation's

[63] Alanen and Eden, pp. 12-13 & 22-23; Arnold, pp. 59-60.
[64] Alanen and Eden, pp. 16-18; Arnold, p. 56.
[65] Alanen and Eden, pp. 8-10 & 28.

capital before working on Greendale. The Greendale plan is considered one of Peets's finest works. Following the completion of the original section of Greendale in 1938, he continued to prepare plans for suburban developments, including Park Forest, Illinois (1946–47) and the expansion of Greendale (1945–50). Peets taught at Yale and Harvard during the 1950s and wrote extensively on planning issues from the 1920s to the end of his life. In the 1940s, he was a consultant on the design of the grounds of the Pentagon in Alexandria, Virginia, and, in the 1950s and 1960s, he was an advisor to the massive urban renewal of Washington, D.C.'s Southwest quadrant.[66]

Peets's career, according to Professor Arnold R. Alanen, was characterized as "a constant search for universal design principles that could be interpreted and applied within any regional context." This is best illustrated by the 1936 design for the Village of Greendale, his later plans for expanding the suburb, and the postwar design of Park Forest, Illinois. Alanen has written:

> Peets's contribution, therefore, was to blend in a unique way classical design elements with those of the Midwestern landscape and its social and cultural traditions which he deemed important. Talented, philosophical, opinionated, and iconoclastic, Elbert Peets represents the breath and diversity that distinguished the field of landscape architecture in America and the Midwest during the first half of the twentieth century.[67]

While Peets is considered the principal designer of the Greendale plan (in fact, his name alone appears on the original 1936 plan), it should not be assumed that the ideas reflected are entirely his own. When reviewed within the larger regional context, it becomes apparent that fellow town planner Jacob Crane made highly significant contributions to Greendale's planning as well as the overall suburban resettlement program. Jacob Leslie Crane (1892–1988) was a Chicago city planner and an acknowledged expert on zoning, transportation issues, and land use planning. He worked part-time on the Greendale project, and part-time for the National Resources Planning Board (chaired by Chicago industrialist and regional planning advocate Frederic Delano), where he served as the planning consultant for Wisconsin and Illinois and likely participated in the activities of the board's Central Housing Committee. Crane was born in Benzonia, Michigan; received a bachelor's degree in civil engineering from the University of Michigan; and received a graduate degree in town planning from Harvard University in 1921, where he studied with John Nolen. Crane was a past president of the American City Planning Institute, had been employed as a city planning consultant in Chicago for many years, and had served as chief regional planner on the design for the Tennessee Valley Authority community of Norris, Tennessee.[68] He was a member of the Committee on Subdivision Layout at the 1931 President's Conference on Home Building and Home Ownership. Crane continued working on housing policy for the U.S. Government through World War II, and from the 1950s to the end of his life he went into private practice and was involved in many projects, including international ones in Puerto Rico and Greece.

Thinking in broad regional terms, Crane advocated land-use planning at the state level, and in the early 1930s pioneered in developing state plans for Illinois and Iowa. Crane believed that the control of land subdivision was one of the urgent and most valuable phases of city planning. Crane was forward-looking in his approach and believed that a highly important function of the planner was "to sense the sentiment and ideals of the town,

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[66] Ibid, p. 9; Alanen, "Elbert Peets: History as Precedent," pp. 193-211; Christiane Crasemann Collins, "Hegemann and Peets: Cartographers of an Imaginary Atlas," introduction to Werner Hegemann and Elbert Peets, *The American Vitruvius: An Architects' Handbook of Civic Art*, (New York: The Architectural Book Publishing Company, 1922; reprint edition, New York: Princeton Architectural Press, 1988), pp. v-xx; Arnold R. Alanen, "Elbert Peets," in *Pioneers of American Landscape Design*, Charles A. Birnbaum and Robin Karson, eds. (New York: McGraw Hill, 2000), pp. 293-96; Paul D. Spreiregen, "Elbert Peets," in William H. Tishler, editor, *American Landscape Architecture: Designers and Places*, (Washington, D.C.: The Preservation Press, 1989), pp. 108-11.

[67] Alanen, "Elbert Peets: History as Precedent," p. 211.

[68] Alanen and Eden, p. 9-10; Lampl, p. 31, fn. 26.

to appraise new conditions and new tendencies and facilities, and to readapt or even to abandon and remake any item or items in the original set of plans." Unlike Peets, Crane was a foremost critic of formal Beaux Arts design which had dominated city planning since the World's Columbian Exposition in 1893, and in 1930 he decried its influence in America: "It is the customary plans for civic centers that I object to most violently on the ground that they are set up on European models. They tend to be classic, symmetrical, static, and, as such, fail as an expression of American civic life. An articulate, functional, asymmetrical ground plan and a bold design of each feature, not necessarily pretentious or costly, will be more appropriate." In contrast, he praised Radburn, as a pioneering experiment "destined to influence greatly American residential planning," saying:

> In residential land-planning the principles underlying Radburn admirably illustrate the new tendencies, namely long-uninterrupted blocks on traffic arteries with intersection grade-separation; individual or group houses or apartments on secluded cul-de-sac streets; interior playgrounds and parks, and school sites accessible to a large area without the necessity of crossing through traffic at any point.[69]

Along with land use planning, Crane saw the design of metropolitan transportation systems as a subject of extreme importance in American city planning. He brought this expertise to the planning of Greendale and the nearby Root River Parkway. Before working on the Greendale project, in a 1930 article for the *Journal of Land and Public Utility Economics,* he drew attention to the practical and economical benefits of using stream beds for parks and parkways. To him, the idea for such corridors was "taking hold of the public imagination," because they "provide streets in a beautiful setting, often where it is most economical to build them, [and] they make possible a great saving of funds which would otherwise have to be devoted to the construction of storm sewers."[70]

Walter Grant Thomas (1883–1969), the principal architect for Greendale's nonresidential buildings, was born in Quincy, Massachusetts on March 3, 1883. He graduated from Harvard University in 1907 and went on to study in Paris, Atelier Duquesne in Rome, and the American Academy in Rome. Thomas was associated with the firms of Maginnis & Walsh, Boston, 1911–1912; McKim, Mead & White, New York, 1912–14; Thomas & Baker, 1928–1934; and then operated a firm under his own name. From 1923 to 1928 he was the assistant state architect for New York, and later, from 1947 to 1953, served as the deputy chief architect for the New York City Board of Education. A member of the American Institute of Architects (AIA), he retired from practice in 1953 and then continued working as a consultant. With his wide expertise, Thomas worked on a variety of building types, including residential, commercial, religious, educational, public buildings, and transportation buildings. He also designed health facilities and penal institutions. He is further noted for his work in city planning.[71] Thomas was fully retired by the publication of the AIA Directory in 1962 and died July 9, 1969.

Harry Howe Bentley (1883–ca. 1960) was a nationally known architect who specialized in the architecture of small houses. Born in Iowa in 1883, he received his B.S. in Architecture from the Massachusetts Institute of Technology in 1908. He taught at the Armour Institute of Technology (now Illinois Institute of Technology). Prior to joining the faculty, he worked in New York, Boston, and Chicago, In Chicago he worked with Howard Van Doren Shaw, a proponent of the Arts and Crafts movement, who was best known for his English manor style homes and businesses on the city's North Shore. Bentley also spent much of 1911 and 1923-24 traveling in Europe. His travels, especially in France, greatly influenced his style. This is evident in his 1931 publication,

[69] Jacob L. Crane, Jr. "A City Planner on His Profession," *The Journal of Land and Public Utility Economics* 6, no. 1 (February 1930), pp. 47, 49, & 50. The best discussion of Crane's work in state and regional planning can be found in Mel Scott, *American City Planning Since 1890* (Berkeley, California: University of California Press, 1969).

[70] Crane, "A City Planner," p. 50.

[71] George S. Koyl, ed., *American Architects Directory* (New York: R.R. Bowker Co., 1955), p. 556.

Small Houses from French Villages, published as part of the Tuileries Brochures, a series of monographs on European architecture.

Bentley came to the Greendale project with experience in domestic design, and a particular interest in exploring the use of concrete block and cement paint. In 1929, Bentley, then practicing in Highland Park, Illinois, won a design award from the builders' exposition in Chicago for a home "costing over $12,000 and under $25,000." Located in Ravinia (Highland Park), the home has brick walls exposed on the inside and painted white with cement paint. Bentley noted: "The white masonry walls of the interior together with the dark stained ceiling of wood boards and exposed beams produces a result which is reminiscent of peasant cottages in the old country."[72] Bentley designed several cottages in Ogden Dunes, a resort community on the southern shore of Lake Michigan in Indiana, the first being a summer home constructed of rough mortared concrete blocks in 1930. A year later an article in the *Chicago Daily Tribune*, highlighted Bentley's design of another year-round vacation home in the dunes community; this design was also constructed of concrete block, with the interior painted with waterproofing cement paint. The home's estimated cost was $6000 to $8000.[73] Bentley was a member of the AIA, and the 1956 directory listed him as practicing in Illinois and Washington, D.C.

Topography, housing type, cost of materials and local wage schedules helped determined the number of dwellings planned for the initial section of each greenbelt town. The first neighborhood unit at Greendale and at Greenbrook was to have 750 dwellings, while Greenbelt and Greenhills were to have 1000 dwellings each. By late March 1936, the preliminary plans for Greendale were finished. The design team hoped that two more sections could be added to Greendale later, providing homes for about 12,000 people.[74]

While the designers labored to prepare the plans, several thousand questionnaires were distributed to members of Milwaukee's labor unions, churches, civic groups and ethnic associations. More than 2,000 were returned, but only the 1,000 that came from families reporting annual incomes in the target "moderate" range—between $1000 and $2,000—were tabulated. The surveys showed that families in the target income range spent an average of between $21 and $28 per month in rent; the rents at Greendale would match this spread. In early December 1935, Clarence Stein had completed his research on rents and operating costs. He warned that unless Greendale and Greenbrook were expanded to 1,000 dwellings, rents would have to be raised to off-set operating costs, making the housing too expensive for families earning less than $1,250 per year. The Greendale team balanced Stein's data against additional cost-saving measures (such as limiting grading done on the site) and calculated that no more than ninety of the one-bedroom units (for the lowest income families) could be built out of the 750 dwellings planned. The surveys showed that three-quarters of the respondents preferred a single-family house to an apartment or row house. Peets did not accept the conventional wisdom that row housing was the only economically feasible type of housing for families with modest incomes. He felt that a detached residence was superior, and that each house should have its own fenced yard. Therefore, the initial plans for Greendale called for 380 single-family detached houses and 370 units in multifamily dwellings. The latter group was to consist of 100 twins, 250 units grouped in rows, and two apartment blocks, each with twenty-five units. Some 392 of the dwelling units were to have three bedrooms, 248 were to have two bedrooms, ninety were to have one bedroom, and twenty were to have four bedrooms.[75]

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[72] Louise Bargelt, "Home Building and Remodeling," *Chicago Daily Tribune* 7 July 1929: B2; *Popular Science Monthly* also featured the house in its May 1929 publication; William Dewey Foster, "Comfort Behind Brick Walls," *Popular Science Monthly*, May 1929: 75-76, & 147.

[73] Louise Bargelt, "Home Building and Remodeling," *Chicago Daily Tribune,* 1 March 1931: A 11.

[74] Alanen and Eden, pp. 27-28.

[75] Ibid., pp. 28-29 & 42; Arnold, p. 98; U.S. Resettlement Administration, "Description of the Greendale Project," 2 July 1936, section 10, p. 3, on file, Greendale Historical Society.

The survey returns indicated that a typical Greendale family would be composed of a husband, a wife, and two children. The principal (male) wage earner would hold a skilled manufacturing job paying $1,400 a year. The questionnaires also suggested that Greendale's population would be a youthful one, as close to seventy percent of the members of the families that responded were younger than thirty-seven years of age, and more than half were below the age of fourteen. Consequently, educational and recreational facilities would be especially important. Larger homes also would be needed for growing families; for this reason, a majority of the residences would have three bedrooms—one for the parents, one for the girls and one for the boys. Public transit was not a part of Greendale's plan mostly because Milwaukee's industry was widely dispersed. However, more than sixty percent of the families that participated in the survey owned a car. Therefore, garages were planned for ninety percent of Greendale's homes.[76]

The surveys also enumerated the community amenities future Greendale residents hoped to enjoy. A flower garden (ninety-four percent), a vegetable garden (ninety-two percent), and a library (eighty-six percent) were the most desired. A swimming pool (seventy-nine percent), a community hall (sixty-one percent) and baseball fields (fifty-seven percent) were also popular choices. Many wished for a beauty parlor (forty-six percent), a bowling alley (forty-five percent), tennis courts (forty-one percent) and a tavern (thirty-five percent). Respondents also wrote in requests, several of which were accommodated, including an automobile service station, a movie theater, a drug store, health services, a barbershop, and village fire and police services. Although ninety percent had requested a church of their denomination, constitutional law prohibited the government from building churches. However, church services could be held in the community building and the plan did set aside several sites for future church construction.[77]

As of March 1936, the plans for Greendale called for the eventual construction of three town sections on 525 acres, as well as 475 acres of one- and two-acre home sites, fifty-five acres of allotment gardens (which Greendale residents could lease), ten acres for light industry (where the village women could work), and 325 acres of village parks. The 2,000-acre greenbelt was to include 170 acres of park land along the Root River, 560 acres that would be deeded to Milwaukee County to create the Root River Parkway, and 1,370 acres in the form of collective farms. With the $7 million initially allocated, plans for the greenbelt would be carried out, and one town section would be built. This town section would encompass 155 acres of development, 180 acres of park land within the village, and fifteen acres of allotment gardens.[78]

Construction on the first town section of Greendale began in April 1936 with a crew of 332 men. Greendale's work force would peak at about 2,000 in October 1936. As summer moved into fall, the project lagged far behind schedule while the man-hours expended mounted alarmingly, in part due to an intense and prolonged heat wave. A bigger cause was the conflict inherent in the dual purposes of the greenbelt town program: to demonstrate that a model community for moderate-income families could be built efficiently and economically and at the same time to create jobs. Most of the laborers were paid through the Works Progress Administration (WPA), which provided the men with rudimentary, labor-intensive equipment such as picks, shovels and horse-drawn wagons. A frustrated Tugwell reportedly suggested to President Roosevelt that the laborers should be issued spoons. By October 15, Greendale's planners realized that costs would far exceed the $7 million budget and reluctantly decided to defer the construction of all housing not already underway. At that time there were 366 buildings with 572 dwelling units under construction. The infrastructure had been built first, so that all the streets, water and sewer lines needed for a town of 1,200 families were already in place. The plan to establish collective farms was abandoned, and the existing farmsteads were repaired and leased.[79]

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[76] Alanen and Eden, pp. 28-29.
[77] Ibid., p. 29.
[78] Ibid., pp. 32-33; U.S. Resettlement Administration, "A Description of the Greendale Project," section 1, pp. 3-4.
[79] Alanen and Eden, pp. 46-48 & 51; Arnold, pp. 96 & 115.

Due to cost overruns, the number of residences in the other greenbelt towns were to be reduced as well: Greenbelt to 885 dwelling units and Greenhills to 676. This meant that the towns could not be turned over to a local cooperative housing authority because they would have too few residents and businesses to generate sufficient rents to support necessary municipal services and amortize the debt. The Federal government would have to retain ownership of all three towns for the foreseeable future. The Bankhead-Black Act, adopted June 29, 1936, allowed this, and permitted each greenbelt town to incorporate and operate as a municipal government, supported by "sums in lieu of taxes" paid by the Federal government. Retaining ownership of the towns had the added advantage of protecting the undeveloped land in each community from unscrupulous developers; it also left open the possibility that the communities could be completed as originally intended should the funds become available in the future.[80]

Progress in the greenbelt towns was further complicated by the resignation of Tugwell on November 18, 1936. He had been the lightening rod for anti-New Deal sentiment during the 1936 presidential campaign. An editorial in the *New York Times* had proclaimed Tugwell "a visible and personal link…between the Comintern in Moscow and the aspiring young reformers in Washington."[81] Inflammatory accounts in the press labeling the greenbelt projects "Tugwell Towns" convinced many Americans that the program was anti-American and a communist experiment.[82]

Following Tugwell's departure, the RA was absorbed into the Department of Agriculture. The RA was subsequently dissolved and the greenbelt programs transferred to a new agency in the Department of Agriculture, the Farm Security Administration (FSA), in September 1937. The FSA took over the RA's resettlement communities as well, of which thirty-eight had been completed, and eighty-four were unfinished. The greenbelt town program staff was reduced to a minimum and transferred to the FSA. Will W. Alexander, who had been Deputy Director of the RA under Tugwell, was named to head the new agency. New emphasis was placed on the three communities' purpose as low-cost demonstrations of the principles of large-scale planned development, home construction, and neighborhood planning.[83]

A model house, with furnishings designed especially for the project, had opened in Greendale at 5505 Acorn Ct. on February 7, 1937 (Figures 16-18). During a twelve-month period, some 650,000 visitors streamed to the site, including many design professionals, builders, housing officials and realtors, some from as far away as Moscow.[84] More than 3,000 families applied to live in Greendale. The Federal government screened the applications in February 1938 and forwarded 2,000 to a panel of social workers for their review. Members of the panel inspected the applicant's current housing to determine how poor the family's quarters were, how clean the family was, and to find "people who have in the past taken care of the property in which they have lived, persons of good moral character, who have been able to get along with their neighbors."[85] Families also needed to be of a suitable size for available accommodations. Neighbors and employers were interviewed to ensure the selection of families who would actively participate in the establishment of a wholesome, solid, stable community. Two-income families were excluded (wives were expected to stay home and take care of the children), as were families that it was thought might cause "exceptional social problems." After families moved in, children were provided with annual physical and dental examinations; they also received special educational intervention if necessary. [86]

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[80] Alanen and Eden, pp. 52-54; Arnold, p. 91 & 127-32.
[81] *New York Times*, 19 November 1936, quoted in Arnold, p. 31.
[82] Arnold, p. 31; Lampl, p. 39.
[83] Alanen and Eden, pp. 52-53. See also Kirkpatrick, "Housing Aspects of Resettlement."
[84] Alanen and Eden, pp. 45 & 49.
[85] Mr. Mellett, selection officer, "Greendale, Wisconsin" (mimeograph), n.d., Box 9, John S. Lansill Papers, University of Kentucky Library, Lexington, Kentucky, quoted in Alanen and Eden, p. 54.
[86] Arnold, pp. 137 & 141.

When Greendale opened on May 1, 1938, rents ranged from $19 a month (for a one-bedroom bachelor unit) to $32 a month (for a 4-bedroom, single-family house). The Federal government established the rent schedule by calculating that each family should pay no more than twenty-five percent of its income in rent and utilities (which included water, heat, and electricity). Thus family income ranged between $1200 and $2000 per year. The first residents had a median age of thirty-three years, and averaged an eleventh grade education (as compared with a national median educational level of eight and three-fourths years of schooling for whites over the age of twenty-five). Slightly more than one-third were Catholic, slightly less than one-third were Lutheran, another one-quarter belonged to other Protestant denominations, and one-tenth claimed no church affiliation.[87]

From the beginning efforts were taken to establish a new type of community that through its design would foster community cooperation and good citizenship. Addressing this goal in 1944, Walter Kroening, the village's community manager, wrote:

> In the planning of Greendale, perhaps the primary objective was to show how better conditions and a full community life could be developed in a suburban town. It was recognized that living conditions and environment greatly influence the attitude of families toward community affairs, and that families living in big cities often lose nearly all contact with community affairs and became indifferent to their responsibilities as citizens. The planners of Greendale wanted to foster a better attitude. They began by providing for pleasant living and a wholesome atmosphere.[88]

The new community featured a village hall, a fire and police station incorporating a central heating plant for the administrative and commercial buildings, a sewage treatment plant, a water tower and two artesian wells, and a school/community building. The latter incorporated classrooms for kindergarten through eighth grade, a public library, and a gymnasium with an auditorium where public social events and church services could be held. The commercial area included facilities for a movie theater seating 600 persons, a tavern and restaurant with an outdoor garden, a garage and filling station, offices for a doctor and a dentist, and retail spaces for two food stores, a variety store, a drug store, a barbershop, a beauty parlor, a tailor, and a shoe repair shop. Sites were set aside for the expansion of the commercial area, as well as for the erection of Lutheran, Catholic and non-sectarian Protestant churches (these facilities were not built until the 1950s). In addition, there were three tennis courts, a horseshoe pit, five playgrounds, and a lighted ball field. Most of the parks were left in a natural state or landscaped to look like the fields or pastures one might find on the edge of a rural area. To enhance the pastoral character of the community, electrical and telephone cables were installed underground. Finally, the farmstead where Jeremiah Curtin spent much of his childhood, as well as several abandoned lime kilns, were retained because Elbert Peets hoped to restore them as historic monuments. Curtin (1835–1906), a noted linguist and translator, served as secretary to the United States Legation at St. Petersburg in Russia and later worked at the Bureau of American Ethnology at the Smithsonian Institution. In 1951, a local chapter of the Daughters of the American Revolution worked with the Federal government to restore the Curtin House; soon after it was donated to the Milwaukee County Historical Society.[89]

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[87] Ibid., pp. 139 and 169; Alanen and Eden, p. 54; Douglas Gordon Marshall, "Greendale: A Study of a Resettlement Community," (Ph.D. dissertation, University of Wisconsin-Madison, 1943), pp. 19-20.

[88] Walter E. Kroening, "The Story of Greendale: A Government Demonstration in Community Planning and Public Housing," April 1944. Typed manuscript in the Greendale Historical Society collections. A similar piece appeared in the tenth anniversary publication, *This is Greendale.*

[89] Alanen and Eden, pp. 34-35; U.S. Resettlement Administration, "Description of the Greendale Project," section 9, pp. 5 & 12 & section 10, p. 10; "The Story of Greendale," pp. 13-16. Biographical information for Jeremiah Curtin comes from American Biography Online: https://www.anb.org/display/10.1093/anb/9780198606697.001.0001/anb-9780198606697-e-1401161, and the Milwaukee County Historical Society: https://milwaukeehistory.net/jeremiah-alma-cardell-curtin/.

On moving into Greendale, each family received a copy of the rules and regulations, *Helpful Suggestions for Greendale Residents*, which explained community restrictions and how to care for their new home and yard. Residents may well have bristled at the patronizing tone of the introduction which stated: "The following suggestions will help to promote the best interest of Greendale which, after all, are your interests."[90] In an attempt to instill in the residents pride in their home, as well as to protect the government's investment, the regulations prohibited such things as driving nails into the walls, installing exterior radio aerials, and planting corn in the yard, and asked "that parents instruct their children not to cut corners over the grass." The pamphlet also noted that a plan for the garden had been prepared for each yard, with which residents were asked to conform.[91] Other initiatives intended to inculcate residents with the values necessary to join the middle class included leaving the kitchen pantry shelves and the area underneath the sink open to view to encourage neatness (an indispensable good habit for the upwardly mobile), and mandating that families with children of both sexes must live in a three-bedroom (or larger) home to prevent boys and girls from sleeping in the same room.[92] Seemingly dictated by a remote bureaucracy, these management practices were perceived by many residents as intrusive, frustrating them and reinforcing their resolution to stay only until they could save enough money to purchase a home of their own.[93] Douglas Gordon Marshall's 1943 study of Greendale found that the vast majority of the residents felt that the management was "too paternalistic in its attitude and has exercised too much control."[94]

Despite Marshall's findings, a sense of belonging and community pride persisted at Greendale through the war years and proceeded to shape the town's future growth. In 1948 the tenth anniversary publication, *This is Greendale,* carried a lengthy poetic tribute celebrating the community, its special environmental qualities, and civic amenities. Wartime activities such as the successful paper-drive were heralded as patriotic and evidence of community support. An updated version of Village Manager Walter Kroening's "Story of Greendale" was presented along with Elbert Peets's 1948 plan for the town's future development. Most interesting was the essay by Clarence Stein praising the community, which several years later would form an entire chapter of Stein's *Toward New Towns*. A critical thinker might view the tenth anniversary publication, which was developed by a committee of residents and community leaders, as self-promotional and question whether or not it presented a realistic view of how the people of Greendale felt about their community. The demographic trends and long tenure of families within the community certainly indicate that once accepted as Greendale residents, most were willing and eager to remain in Greendale. Records indicate that families often moved from one rental unit to another as their family needs or preferences changed. When new lots came up for sale on Clover Lane, Catalpa St., and Cornflower Lane in the late 1940s, Greendale residents were among the first buyers. When the original houses were finally sold in the early 1950s, many renters purchased the homes where they had been living, some since 1938.

Greendale's first residents knew they were building an entire town from the ground up and met the challenge with enthusiasm and a sense of adventure. One of the first challenges was the lack of business in Greendale—all the commercial buildings were vacant. Sherwood Reeder, the first village manager, encouraged the residents to organize a consumer cooperative to open and operate commercial establishments, as had been done at Greenbelt. The Greendale Cooperative Association (GCA) formed on July 13, 1938, and incorporated on August 22, 1938. The GCA leased the commercial buildings from the government with a loan from the Consumer Distribution Corporation, the same group that had underwritten Greenbelt's cooperative. The GCA opened a food store in September, a service station in November and a barbershop in December. The GCA

[90] U.S. Department of Agriculture, Farm Security Administration, *Helpful Suggestions for Greendale Residents*, p. 1.
[91] Ibid., p. 10.
[92] *Greendale Remembers,* pp. 20-21; Wright, *Building the Dream*, pp. 226 & 232.
[93] Arnold, p. 158; Marshall, p. 34, found that about half the families moved from Greendale for this reason.
[94] Marshall, p. 71. In his 2000 study of Park Forest, Illinois, *America's Original GI Town: Park Forest, Illinois* (Baltimore: Johns Hopkins University Press, 2000), Gregory C. Randall expressed similar criticism of Greendale's controlled environment.

subsequently subleased the variety store, drug store, movie theater, shoe repair shop, beauty parlor and tavern to private individuals. Other cooperative enterprises established in 1938–39 included the local weekly newspaper, the *Greendale Review* (published until 1952), the Greendale Credit Union, the Greendale Dairy Distributing Company (which had its own herd of cows), and two cooperative medical organizations. The Greendale Medical Union was short-lived, but the Greendale Health Association, associated with the Milwaukee Medical Center, functioned until after World War II. In 1948, the Public Housing Administration (PHA), a new Federal agency, took over the management of the greenbelt towns. The PHA refused to renew the GCA's leases, and the GCA folded, dissolving in December 1948.[95]

Greendale residents also organized a General Committee in July 1938 to address other issues and promote community activities. The General Committee appointed several subcommittees, including telephone, incorporation, recreation, government, labor relations (which tried to find jobs for the unemployed), and transportation. The latter was a pressing problem and despite several attempts to establish bus service between Milwaukee and Greendale, each time the provider found the route unprofitable and discontinued service, leaving Greendale residents to fend for themselves. Many social and civic organizations formed early on as well, such as the Women's Social Hour (later known as the Greendale Woman's Club), Garden Club, Boy Scouts, Girl Scouts, and clubs for those interested in bowling, music, singing, handicrafts, dancing, drama, baseball, basketball, radio, philately, singing and chess.[96]

Greendale incorporated as a village on November 11, 1938, following a referendum held on October 22. The first Village Board was elected on December 10, 1938. On February 25, 1939, the citizens of Greendale voted to establish the village manager form of government, and on April 18 the board elected Sherwood Reeder as the community's first village manager. As manager, Reeder appointed the village clerk-treasurer, assessor, attorney, health officer and chief of public safety. In addition to health and safety, the village government was responsible for street and road maintenance, street lighting, refuse collection, recreation, sewage, and the care of parks and public areas.[97]

School opened in the Greendale Community Building and School on September 6, 1938, with 432 students; this number would increase to 525 before the end of the school year. The curriculum was student-centered and focused on multi-disciplinary projects, in accordance with the theories of noted progressive educator John Dewey (who had acted as a consultant to the greenbelt town project. School children also received annual physical and dental examinations, and a registered nurse was on staff in case anyone should fall ill. Interestingly, the first "registered nurse" was actually a female physician, Dr. Laura Fisher, who, with her husband, was the first to lease the doctor's office in the village center. In the evenings, the Community Building hosted classes for adults in commercial and vocational education, the fine arts, music, parent education and home-making. Catholic, Lutheran and Union (made up of several Protestant denominations) religious services were held regularly in the gymnasium/auditorium on the weekends until separate church buildings were erected in the 1950s. The library, located in the Community Building and intended for both public and school use, opened on October 17, 1938. It remained in the building until 1970.[98]

In 1940, the population of Greendale stood at 2,810. Committee participation had dropped precipitously. The period of intense activity needed to establish the village government and services, so highly demanding on

[95] Alanen and Eden, pp. 60-61; Arnold, pp. 180-81; "Events of 1938," undated, Greendale Historical Society. For more about the *Greendale Review*, see https://chroniclingamerica.loc.gov/lccn/sn85040671/.

[96] *Greendale and the Activities of Its People,* (Greendale: N.p., 1939), no page numbers, Greendale Historical Society; Alanen and Eden, pp. 59-60.

[97] Greendale and the Activities of Its People; "Story of Greendale," p. 15.

[98] [Kroening], "Story of Greendale," pp. 14-17; *Greendale and the Activities of Its People;* U.S. Department of Agriculture, Farm Security Administration, "Greenbelt Communities," 25 January 1940, p. 9.

committee members' time, was over. Families that had come to Greendale to take advantage of lower rents and save for a home of their own were moving on. Further, the Federal policy that removed families once their income exceeded the upper limit by twenty-five percent had taken its toll, evicting some of Greendale's most dedicated residents. In 1942, when the Federal Public Housing Authority (FPHA) succeeded the FSA in the management of the greenbelt towns, this policy was eliminated in favor of a revised rent schedule based on family income.[99]

In 1944, Oliver Winston, director of the General Field Office of the FPHA, began investigating approaches for expanding the greenbelt towns so that they would be large enough to be self-sufficient. The FPHA could then transfer the towns to a local homeowners association or public housing authority that could continue to operate them as planned communities, in accordance with the program's original intention. After conferring with Greendale's village manager, Walter Kroening, and a group of village residents organized as the Greendale Tenants Advisory Committee, Winston engaged Elbert Peets to prepare plans for expanding the village. In March 1945, Peets presented his plans, which proposed constructing 3,000 residences in four new sections (each with its own shops and parks), enlarging the existing commercial core, building an industrial park, and leaving much of the undeveloped land as farmland or parks. The plans maintained the hierarchical street system and pedestrian pathways of the original section. Rather than cul-de-sacs, the new residential lanes were in the form of loops that began and ended at the collector streets (a configuration Peets had come to believe was preferable). To attract upper income families, the planner proposed an area of large residential lots along the Root River Parkway. Peets' plans were well received, and would guide much of the future development of Greendale. A group of village residents formed a cooperative, the Greendale Tenants Committee on Mutual Housing, with the intention of buying Greendale, but the FPHA would not sell to them, perhaps because a majority of residents wished either to buy their home or build in one of the new sections. The FPHA identified several possible private buyers, but gave up trying to sell when rising construction costs drove prospective buyers away.[100]

The earliest moves to divest the government of ownership of the village came in the 1940s. As early as July 1940, the Farm Security Administration announced that it would allow privately financed housing in the three greenbelt communities. It estimated that Greendale could be expanded to 750 dwellings and that the new units would not have income restrictions. One stipulation that may have prevented the adoption of this plan was that the FSA intended the land to be leased for ninety-nine years to builders who agreed to build at least 200 units.[101]

However, it was not until after the end of World War II that the first lots opened to the private market. The thirty-one empty parcels of the Clover Lane addition, in the southeast corner of the original plat, were offered for sale in 1946. Intended primarily as a housing area for veterans, it anticipated the eventual sale of all of the residential lots to private homeowners. A local report regarding the sale of the lots noted that the Federal Public Housing Authority (FPHA), which since 1942 had been in charge of administering the greenbelt towns, wanted "to demonstrate that it is very much in earnest about its intention to open Greendale to private ownership." The parcels and the homes to be built on them came with building restrictions and required a design review with the intent of maintaining appropriate setbacks and a uniformity of development. The Design Review Committee noted that they were interested in "a lot development plan which is not out of step with the neighbors, a pleasant grouping of house and garage, a house exterior that fits into the general landscape and looks friendly with the other houses…" Reflecting the cooperative movement poplar in Greendale, the local tenants committee also recommended that purchasers could save money by forming "voluntary contracting groups."[102]

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[99] Marshall, pp. 19-20; Alanen and Eden, p. 57; Lampl, p. 42.
[100] Peets, "Residential Site Planning Texture," pp. 208 & 211; Alanen and Eden, pp. 75-79; Arnold, pp. 230-31.
[101] "FSA to Permit Private Homes in Model Suburban Villages," *Wisconsin Rapids Daily Tribune*, 19 July 1940, p. 2.
[102] Greendale Design Review Committee, "Information for Purchasers of Lots in Clover Lane Subdivision," October 1945.

When the FPHA dissolved in May 1947, management of the greenbelt communities was transferred to a new agency, the Public Housing Administration (PHA). The head of the PHA was John Taylor Egan, who had served as a senior architect on the design team that originally planned Greendale. Egan was given the task of disposing of the greenbelt towns. As Egan debated how best to accomplish this, Greendale residents proceeded to take action. The Village Board hired Peets to prepare a zoning ordinance early in 1948. Two organizations formed to buy the community. The first was the Mutual Housing Corporation (MHC). The second, led by Arthur Marcus, was the American Legion Community Development Corporation (ALCDC). Competition between the two groups was fierce. The ALCDC made the PHA an offer of $2 million for Greendale, a figure that was too low for the PHA to accept. In December 1948, Marcus persuaded the City of Milwaukee to allocate $300,000 to purchase all of the ALCDC stock. Marcus then enlisted the support of U.S. Senator Joseph McCarthy, who sponsored a resolution that would allow the PHA to deal only with the ALCDC, excluding all other bidders. Fearful that the City of Milwaukee, as sole owner of the ALCDC stock, would annex Greendale, members of the MHC and other local residents who wished to remain an independent municipality organized the Greendale Veterans' Cooperative Home Association (GVCHA) to oppose the ALCDC. The two groups presented plans to the community, both promising that residents could purchase their current homes. In a referendum held on August 23, 1949, residents voted overwhelmingly in favor of the GVCHA scheme, 621 to ninety-eight. Stunned, the Milwaukee Common Council withdrew its support from the ALCDC and filed suit to recover its $300,000 investment. Shortly thereafter, Marcus died, leaving the City of Milwaukee the bill for his private nurse. Despite these developments, the PHA refused to deal with the GVCHA.[103]

Senator Joseph McCarthy, annoyed at the defeat of the ALCDC and politically opposed to cooperative organizations, worked without the knowledge of the PHA to find a buyer for Greendale. McCarthy was unsuccessful and in February 1950, the ALCDC's special negotiating status was withdrawn. President Harry S Truman briefly suspended efforts to dispose of the greenbelt communities at the beginning the Korean War (June 1950), in case they might be needed for defense housing. In 1951, the PHA decided to sell the housing first and retain the undeveloped lands for the time being. In January 1952, the original section of Greendale was platted as "Village Center." An independent assessor set the prices for the housing, which varied from about $2,500 per unit in the six-unit row houses, to $9,500 for the three-bedroom, single-family detached homes. First, tenants were given the opportunity to purchase their homes; if more than one resident in a row house wanted to buy the building, the competitors were obliged to draw lots (four-unit and six-unit row houses could be divided between two owners). Veterans would have first choice on any unsold housing, as well as the forty-four vacant residential lots. Anything left over would be available to the general public. By the fall of 1952, all the housing and all the empty residential lots had been sold.[104]

In October 1952, the PHA offered the 2,236 acres of undeveloped land for sale, intending to sell the municipal and commercial buildings separately. The tenant farmers organized as the Rural Tenants Association, but the PHA refused to negotiate with them. Milwaukee's socialist mayor, Frank Zeidler, was concerned about what might happen to Greendale if real estate speculators acquired the undeveloped lands. He and Village Manager Walter Kroening approached two prominent Milwaukee businessmen about ensuring that Greendale be developed in keeping with its original principles. In response, Richard Herzfeld, owner of a Milwaukee department store, and W.A. Roberts, president of the Allis-Chalmers manufacturing firm, organized the Milwaukee Community Development Corporation (MCDC). Another Milwaukee industrialist, Francis J. Trecker, and attorney Louis Quarles joined Herzfeld and Roberts on the board of directors of the new corporation. Quarles was named president. In January 1953, after a brief period of negotiations, the MCDC entered into a contract to purchase all the undeveloped land (2,300 acres) as well as the municipal and commercial buildings from the PHA for $825,000. The Federal government, which had spent about $10.4

[103] Arnold, p. 232; Alanen and Eden, pp. 79-84.
[104] Ibid., pp. 84-86.

million dollars to build Greendale in 1936–38, received a total of approximately $5.9 million selling it off in 1952–53.[105]

Overall there was a sense in the community and by others in the Milwaukee region that Greendale had a unique character and history that should be retained for the future and guide subsequent development. The residential properties were offered for sale to their current occupants, but there remained the issue of the sale of the commercial buildings and undeveloped land. Intending to prevent development that did not correspond to a plan for future expansion, the corporation hired Leroy Riegal, AIA, to head the planning staff and retained Elbert Peets to prepare a master plan for future development. The new plan allocated 1,000 acres to parks and parkways and set aside 135 acres for future schools and churches.

The MCDC saw Greendale both as a unique experiment that should be developed in keeping with its greenbelt planning principles, and as a good business investment. Peets' plan, completed in 1957, represented an update of his 1945 design. Each new residential neighborhood would have ten to twenty percent of its area in parks, but, at the request of the MCDC, residential areas were expanded and the greenbelt decreased to coincide with the boundaries of the Root River Parkway. The MCDC and the Greendale Village Board worked together to coordinate residential development with the extension of utilities and the construction of school buildings. In 1955, the first new plat was recorded. As each addition was built, a homeowners association was organized to care for the common greenspace. Construction in Greendale boomed. In 1950, Greendale's population stood at 2,752. By 1960, it had reached 6,843. In 1958, the MCDC sold the shopping center and gave the village hall to the village board.[106]

In 1964, the MCDC sold its remaining 1,100 acres of undeveloped property to the Greendale Land Company (GLC), a Milwaukee realtor, for $1 million. The GLC continued to develop the community much as the MCDC had, balancing commercial and residential construction, and incorporating ample greenspace. By the 1980s, Greendale was complete. In 1980, the village counted 16,928 residents.[107] Today, Greendale remains a thriving community with a remarkable, pedestrian-oriented character, abundant natural parks within easy reach of every home, and friendly, intimate neighborhoods. The town numbered 14,046 in 2010.

EXPRESSING CULTURAL VALUES: GARDEN CITY PLANNING AND THE NEIGHBORHOOD UNIT PLAN

Greendale embodies the foremost principles of architectural design and urban planning of the 1930s. These principles had developed over a twenty-five-year period and built on the synthesizing of the American planning traditions of naturalistic residential areas and City Beautiful urban centers with English garden-city planning principles, which first appeared in the U.S. circa 1908. Refined through the defense housing projects developed for the Federal government during World War I, this synthesis was reinvigorated through the work of notable designers John Nolen, the town planner of Mariemont, Ohio, and Henry Wright and Clarence Stein, the designers of Sunnyside Garden, in Queens, New York, and Radburn, New Jersey.

Greendale and the other greenbelt towns integrated Ebenezer Howard's garden-city principles with American planning traditions, following many of the conventions that planners Clarence Stein and Henry Wright had introduced in the design of Radburn, New Jersey, and planner John Nolen had incorporated in the design of Mariemont, Ohio. The Resettlement Administration's brochure, *Greenbelt Towns: A Demonstration in*

[105] Ibid., pp. 86-88; Arnold, p. 236.
[106] Alanen and Eden, pp. 89-90.
[107] Ibid., p. 92.

Suburban Planning, testifies to these influences by featuring photographs of Welwyn (1919), the British garden city, and by highlighting Radburn as "America's first scientifically planned garden town."

Ebenezer Howard's Garden City of Tomorrow

Ebenezer Howard (1850–1928) was an English social reformer who worked as a court stenographer in his native London. Howard was moved by the dreadful living conditions of the urban poor, illustrated in publications such as *The Bitter Cry of Outcast London* (Andrew Mearns, 1883), and *How the Other Half Lives: Studies among the Tenements of New York* (Jacob Riis, 1890). Influenced by the utopian views of Benjamin Ward Richardson (*Hygeia, or the City of Health*, 1876) and Edward Bellamy (*Looking Backward: 2000–1887*, 1888), and the single-tax model developed by Henry George (*Progress and Poverty*, 1881), Howard proposed decentralizing London by creating a series of satellite cities around the metropolis, each of which would integrate the cultural advantages of the town with the healthful benefits of the country. Howard described his proposed garden cities in the treatise, *To-morrow: A Peaceful Path to Real Reform* (1898), re-issued in 1902 under the title, *Garden Cities of To-morrow*. Like many radicals of his day, Howard believed that the antisocial problems of the urban poor—alcoholism, violence, and crime—would disappear, and social cooperation naturally develop, if the poor were relocated to a better physical environment (this was the "peaceful path to real reform" hinted at in the title of his treatise). The garden city was to be comprehensively planned, self-sustaining, and limited in size (to 6,000 acres with development confined to 1,000 acres) and population (to 32,000 inhabitants). Howard's simple diagram showed a commercial center and central park, ringed with six mixed-income residential areas (each with a public school) and interspersed with parks and community facilities. Industry was to be concentrated along a railroad corridor around the edges of development, and the whole city was to be encircled with a broad "greenbelt" in agricultural and recreational use. The garden city was to be held in trust, its property never sold but rather leased to tenants. The community was to have a municipal government, while businesses and industries were to be administered by cooperatives. Finally, as property increased in value, this unearned increment was to be reinvested in the community for the benefit of the tenants.[108]

The Garden City Association organized in Britain in 1899 in hopes of building a garden city. In 1903, Letchworth was erected outside of London, its construction financed by the Garden City Pioneer Company Limited, a subsidiary of the Garden City Association. Planners Barry Parker and Raymond Unwin designed Letchworth as a mixed-income community, with a formal town center and central park, clustered housing alternating with parks, land set aside for industrial use on the outskirts, and an agricultural greenbelt. In fleshing out Howard's diagram, Parker and Unwin drew inspiration from two English company towns, constructed by benevolent factory owners concerned about their employees living conditions: Port Sunlight and Bournville. Port Sunlight was erected in 1887 for the workers at the Lever Brothers soap-making firm, outside of Liverpool. Port Sunlight displays row housing clustered on the outer edges of each irregular-sized block, leaving the interior of the block in communal allotment gardens (a motif that would be picked up in later developments). George Cadbury of the Cadbury Brothers chocolate-manufacturing company established Bournville near Birmingham in 1894. Bournville was notable for its abundant greenspace, and for providing a private garden for each dwelling unit. The plan of Letchworth shows a variation of Port Sunlight's residential blocks with interior green space, composed of larger blocks, each cut with a cul-de-sac. In 1906, Parker and Unwin designed the

[108] Kermit C. Parsons and David Schuyler, eds., *From Garden City to Green City: The Legacy of Ebenezer Howard* (Baltimore: Johns Hopkins University Press, 2002), pp. 3-4 & 40-41; David Barry Cady, "The Influence of the Garden City Ideal on American Housing and Planning Reform, 1900–1940," (PhD diss., University of Wisconsin-Madison, 1970), pp. 7-15.

suburb of Hampstead Gardens (near London), which in keeping with garden city principles featured small commercial areas at the entrances into the plat, cul-de-sacs, and slightly curving residential lanes.[109]

Welwyn, a later garden city project, had substantial influence on American designers. The town was financed by a joint stock company and constructed near London in 1919. Designed by Louis de Soissons, Welwyn displays a town center with axial streets, slightly-curving residential lanes laid out in such a way as to preserve natural features, residential blocks of varying sizes each displaying several cul-de-sacs, and an encircling agricultural greenbelt. Although both Letchworth and Welwyn conformed to Howard's principles of physical design, neither was able to fulfill his critical social reform elements of communal ownership, cooperative management and reinvestment of the unearned increment. In the case of Letchworth, the directors of the Garden City Pioneer Company (who included W.H. Lever and George Cadbury) had promised investors a return of five percent. This proved too little to attract many investors, raising the cost of housing and making it too expensive for the low-income families Howard had hoped to serve. The housing at Welwyn was more affordable, thanks to a government subsidy. At both Letchworth and Welwyn, farming the greenbelts failed due to the poor quality of the soil. Finally, both communities experienced only limited success in attracting industry. Given this, it is perhaps not surprising that the Garden City movement, which became an international phenomenon, emphasized the physical design aspects of Howard's concept and generally ignored his social reform ideas. Garden-city planning principles were employed in the design of suburbs and subdivisions throughout the western world, due in large part to Unwin's popular book, *Town Planning in Practice* (1909), and his subsequent speaking tours. An entertaining lecturer, Unwin advocated designs composed of a formal town center surrounded by residential zones of slightly-curving streets, studded with parks.[110]

American Garden City Planning

In the United States, planners and landscape architects had been designing residential subdivisions in the naturalistic tradition with curvilinear streets, oddly-shaped blocks, and limited linear, green space since (Frederick Law) Olmsted, (Calvert) Vaux & Co. had planned Riverside, Illinois in 1869. The Chicago World's Columbian Exposition of 1893 had popularized City Beautiful principles for downtown plans, featuring broad, axial streets, formal gardens with statuary, and tree-lined parkways, and formal Beaux-Arts design principles soon after dominated the training of aspiring young designers in the fields of architecture and landscape architecture. American planners began blending garden city principles into the naturalistic and City Beautiful models around 1910, creating suburbs and subdivisions that integrated residential areas with naturalistic, irregularly-shaped blocks and curvilinear streets, with the more abundant and interior-block parks of the garden city projects and the formal town center present in both City Beautiful and Garden City design. Frederick Law Olmsted, Jr., John Nolen, and Werner Hegemann and Elbert Peets were among the leaders of this trend.[111]

The Russell Sage Foundation, a philanthropic organization, constructed America's first Garden City-influenced suburb, Forest Hills Gardens (New York), for working class families in 1910–11. The plan, prepared by Frederick Law Olmsted, Jr., incorporated a small commercial area adjacent to the train station, curvilinear residential lanes including several blocks with interior parks, a public school, several playgrounds, and a large recreational area along one end of the development. Another early Garden City-influenced suburb was Washington Highlands (NR), designed by Hegemann and Peets in 1916. Situated west of Milwaukee in Wauwatosa, the suburb exhibits an axial, tree-lined principal thoroughfare ringed by sweeping residential lanes,

[109] Parsons and Schuyler, pp. 41-42; Cady, pp. 8-9; Ames and McClelland, p. 42; Norman T. Newton, *Design on the Land: The Development of Landscape Architecture* (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1971), pp. 448-52 & 456-60; Bruce E. Lynch and Cynthia D. Lynch, "Washington Highlands Historic District National Register Nomination," 28 September 1988, pp. 8-6.

[110] Parsons and Schuyler, eds., pp. 8 & 43-44; Newton, pp. 460-61; Ames and McClelland, p. 42.

[111] Newton, pp. 364-70 & 466-68; Ames and McClelland, p. 43.

an existing stream preserved as a linear parkway, and numerous small parks. In addition to the physical example provided by projects such as Forest Hills Gardens and Washington Highlands, the Garden City ideal and garden suburb design were widely publicized in architectural journals, technical publications and popular magazines in the 1910s. In addition, the National Conference on City Planning and the National Housing Association (both organized in 1910), endorsed garden-city principles and hosted conferences at which papers on garden suburbs, the Garden City model, and England's experiments with cooperatively-owned housing were prominently featured.[112]

During World War I, the United States was suddenly faced with a housing shortage for workers in cities where defense industries such as shipbuilding and ammunition production were located. In 1918, two Federal agencies were created to alleviate the shortage: the U.S. Shipping Board Emergency Fleet Corporation (EFC) and the U.S. Housing Corporation (USHC). Led by John Nolen, Frederick Law Olmsted, Jr., and Robert D. Kohn, the planners, architects and landscape architects in these programs worked collaboratively, employed Garden City ideas, and prepared comprehensive plans for their projects. Twenty-eight housing projects were erected through the EFC, while the USHC built twenty-seven new communities. Many incorporated elements of Garden City design, including formal commercial centers, curvilinear residential lanes arranged around the public school, and interior-block parks. The architecture, although low-cost, was attractive. Yorkship (Camden, New Jersey), Seaside Village (Bridgeport, Connecticut), Atlantic Heights (Portsmouth, New Hampshire), Hilton Village (Newport News, Virginia), and Union Gardens (Wilmington, Delaware) were among the most admired, inspiring higher standards in residential construction and subdivision site planning, at least in suburbs for the well-to-do, in the years following World War I. The two World War I agencies also provided a new generation of design professionals the opportunity to experiment with garden-city principles and other state-of-the-art ideas. Several of these architects, planners and landscape architects would go on to form organizations that would transform planning in the United States.[113]

The most widely admired Garden City-influenced suburb of the era was John Nolen's Mariemont (NHL), outside of Cincinnati, Ohio. Philanthropist Mary (Mrs. Thomas J.) Emery intended to create a wholesome and self-sustaining community for working-class families at Mariemont. Nolen's final (1921) plan connected an octagonal-shaped town center with residential blocks featuring a few cul-de-sac roads and interior parks as well as a variety of housing types. The plan maintained existing topographic features in the Naturalistic tradition, creating a park along the banks of an existing stream. It also displayed a hierarchical street system, with a wide, central boulevard, wide cross streets, and narrow, residential lanes. Mariemont was designed as an "exemplar" of American small house design and initially well-known architects from several major American cities were invited to develop clusters of single and multi-unit houses within the town plan. Reflecting the leading landscape theories of the day, the planned community blended the influences of the English garden city and American naturalistic tradition into a cohesive whole. Mariemont was unable to attract industry until the late 1930s, leaving much of the plan to be built out after World War II.[114]

Foremost in the efforts to establish a garden city in the United States and to promulgate the planning ideas of Ebenezer Howard was the Regional Planning Association of America. Several of its members would play crucial roles in the greenbelt town program. In 1923, Charles Harris Whitaker, editor of the *Journal of the American Institute of Architects*, invited several progressive designers and social scientists to his office in New York City to exchange ideas. From this meeting, the Regional Planning Association of America (RPAA), an interdisciplinary "think tank," was born. Founding members included: architects and planners Clarence S. Stein, Frederick L. Ackerman, John Bright, Robert D. Kohn, Henry Wright and Frederick Bigger; realtor Alexander M. Bing; economist Stuart Chase; forester Benton McKaye; social critic Lewis Mumford; and Whitaker.

[112] Newton, pp. 474-76; Ames and McClelland, p. 42; Cady, pp. 34-36. Mariemont was designated an NHL, 29 March 2007.
[113] Robinson and Associates, Inc., and Shrimpton, p. 8; Ames and McClelland, p. 44; Cady, p. 45.
[114] Ames and McClelland, p. 45. See also Millard Rogers, "Village of Mariemont NHL Nomination," 29 March 2007.

Housing experts Edith Elmer Wood and Catherine Bauer, as well as landscape architects Tracy B. Augur and Russell Van Nest Black, soon joined the group. Education was the primary goal of the RPAA. Meeting two or three times a week for informal discussions, members strove to educate themselves about topics as diverse as Thorstein Veblen's economics, John Dewey's child-centered education, Scottish planner Patrick Geddes's "geotechnics," regional resource conservation, and social welfare theories. Experts on the given subject were often invited to participate. RPAA members became outspoken proponents of government-built affordable housing (inspired by the American experience during World War I and public housing projects then underway in Europe), regional comprehensive planning incorporating industrial decentralization (possible because electrical power could be extended anywhere, and automobiles could transport people wherever electricity could reach), and both the social reform and design facets of Howard's ideal. The RPAA endeavored to educate others by serving on many planning and housing committees, and publishing numerous articles in professional magazines including *Architectural Record*, *Architectural Forum*, and the *Journal of the American Institute of Architects*, as well as popular publications such as the *Nation* and *New Republic*. Subgroups of the RPAA also collaborated on a variety of projects. Following a visit to Howard and Unwin in 1924, Bing, Stein, and Wright formed the City Housing Corporation (CHC), a limited dividend company established to build a complete garden city. The CHC would produce two highly-influential developments: Sunnyside Gardens and Radburn.[115]

In 1924, the CHC purchased a site in Queens, near New York City, and began developing Sunnyside Gardens (NR) as a residential suburb for moderate-income families. Wright and Stein were obliged to conform to the grid-iron street pattern surrounding the site, but were able to design each of the project's ten blocks as a unit (rather than subdividing them into small lots) due to the property's industrial zoning classification. Row housing and cooperative apartments lined the outer edges of each block, enclosing a common green space for gardening and recreation. Wright and Stein included a community center, cooperative apartments and common green space in their plan for Sunnyside Gardens, in part, to promote positive social interactions between residents and encourage the development of communal feeling. Sunnyside Gardens was completed in 1928. The CHC viewed Sunnyside as an experiment, and a step toward their goal of a fully-realized garden city.[116]

The CHC found a suitable tract for its next project, Radburn (NHL), in 1928. Located in the Borough of Fairlawn, New Jersey, about sixteen miles from New York City, the site lay near a highway and along a branch of the Erie Railroad. The parcel itself encompassed nearly two square miles of farmland and had only one major road running through it. Wright and Stein initially envisioned Radburn as a garden city for moderate-income families with a total population of 25,000. It was to be divided into three neighborhoods, in keeping with the "neighborhood unit" concept articulated by Clarence Perry in the *Regional Survey of New York and Its Environs* (in process for several years prior to its publication in 1929). Perry contended that the size of a neighborhood unit should be tied to the number of households needed to support an elementary school, somewhere between 4,000 and 7,000 people. He recommended that all housing in a neighborhood be located within one-half mile of the school and that at least ten percent of the land be set aside for parks and recreation. Perry also argued that traffic should be directed around, rather than through, the neighborhood. Finally, he maintained that the commercial area should be placed at the periphery, yet be within easy walking distance of all residents' homes.[117]

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[115] Cady, pp. 134-35 & 142; Dirk Schubert, "The Neighbourhood [sic] Paradigm: From Garden Cities to Gated Communities," in *Urban Planning in a Changing World: The Twentieth Century Experience,* Robert Freestone, ed. (New York: E & FN Spon, 2000), pp. 121-23. See also, Roy Lubove, *Community Planning in the 1920s: The Contribution of the Regional Planning Association of America* (Pittsburgh: University of Pittsburgh Press, 1963), pp. 58-66.

[116] Schubert, p. 122; Ames and McClelland, p. 44; Newton, pp. 489-90.

[117] Newton, pp. 490-93; Daniel Schaffer, *Garden Cities for America: The Radburn Experience* (Philadelphia: Temple University Press, 1982), p. 157; Clarence A. Perry, "The Neighborhood Unit," *Neighborhood and Community Planning,* vol. 7, *Regional Survey of New York and Its Environs* (New York: Regional Plan of New York, 1929), pp. 20-89. Although no formal relationship existed between the RPAA and the Sage Foundation which sponsored the *New York Regional Survey* and *New York Regional Plan*, both Perry

Stein and Wright quickly realized that they did not have enough land to provide a greenbelt around Radburn, and that the location was unlikely to attract industry, but they decided to proceed, planning Radburn as a garden suburb and satellite of New York City. The concept of a greenbelt was supplanted by a central green that formed the interior of each superblock. Wright's and Stein's design for Radburn was an Americanized variant of Howard's model, reflecting garden-city principles while incorporating Perry's neighborhood unit formula and innovations that recognized that the automobile, with its attendant dangers to pedestrians, had become an essential part of life in the United States.

Three major design elements distinguished the Radburn plan, earned it the nickname, "the town for the motor age," and made it a landmark example of American city planning. The first element was the superblock, more than ten times the size of a typical American city block, with a four to six-acre interior park, bordered by narrow, cul-de-sacs along which housing was clustered. The measures taken to accommodate the automobile while protecting pedestrians comprise the second distinguishing element of the Radburn plan. These measures include separate circulation systems for vehicular and pedestrian traffic, and off-street parking. The vehicular circulation system employed a hierarchy of roads from narrow, residential cul-de-sacs; wider, collector streets that carried cars around the perimeter of each superblock, unifying groups of superblocks into neighborhoods; and broad, through streets intended to connect Radburn's neighborhoods with each other and with major arterials leading to other communities. The pedestrian circulation system consisted of footpaths, within each superblock, which led from housing to the park, as well as to underpasses that allowed pedestrians to reach schools, recreational areas and the shopping center without crossing a single street. Off-street parking consisted of garages and car-length driveways in the residential areas, and a strip of diagonal parking spaces across the front of Radburn's shopping center. The latter represented an early use of off-street customer parking, which was first seen in J.C. Nichols' Country Club District, a Kansas City, Missouri suburb developed between 1919 and 1931.[118] The third distinguishing element of the Radburn plan was the reverse-front floor plan of the housing, with the kitchen and utility room facing the cul-de-sac (the "service" side), and the family spaces such as the living room and bedrooms overlooking the park (the "garden" side). The Radburn plan focused on families and children, its physical design promoting their health and safety, and facilitating social interactions within and between families.[119]

Unfortunately, only a portion of Radburn's first neighborhood unit had been completed when the stock market crashed in October 1929. The CHC hoped to resume construction, but was forced to declare bankruptcy in 1933, and Radburn was never finished.[120] Lewis Mumford dubbed the plan's distinguishing design elements the "Radburn Idea." The Radburn Idea was integral in the planning of the greenbelt towns, and continues to resonate with planners, architects and landscape architects today.

Emerging Federal Policies and the Neighborhood Unit Plan

The design of each of the RA's greenbelt towns embodied land-use planning principles, social concerns, construction methods, and architectural concepts that coalesced in the 1930s and were at the forefront of Federal policy during a highly pivotal period in the history of American housing. This was the period when the basic tenets of Federal involvement were being defined and far-reaching measures for improving the nation's housing conditions and stimulating the home-building industry were being formulated. In the long-term, the

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and Thomas Adams, the plan's general director, participated in meetings where Radburn was being planned. They both recognized Radburn's importance as a model for residential planning in the age of automobiles and as an antidote to the typical pattern of unplanned, speculative home building.

[118] Richard Longstreth, The Drive-in, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914-1941, (Cambridge, Massachusetts: M.I.T. Press, 1999), p. 136.

[119] Schaffer, pp. 152 & 160; Newton, pp. 490-93; Schubert, pp. 122-24; Ames and McClelland, p. 47. See also Paula S. Reed and Edith B. Wallace, "Radburn NHL Nomination," 5 April 2005.

[120] Shaffer, p. 12.

events of the Great Depression, including the measures implemented by a variety of New Deal programs, would help shape the massive suburbanization of American cities in the second half of the twentieth century.

The earliest and one of the decade's most far-reaching, Federally sponsored measures was the President's Conference on Home Building and Home Ownership, convened in December 1931 by President Herbert Hoover. To Hoover, who had championed the Better Homes movement in the 1920s while Secretary of Commerce, the American home was the "foundation of our national life" and a subject meriting Federal attention. In the foreword to the conference's multi-volume proceedings, he stated: "The next great lift in elevating the living conditions of the American family must come from a concerted and nationwide movement to provide new and better homes." Hoover looked to the private building industry to lead this movement and encouraged business groups to support wisely planned large-scale housing efforts. He acknowledged that architects, engineers, inventors and manufacturers had all made possible the building of houses that were beautiful, convenient, and healthy, but recognized that new methods of extending credit were needed.[121]

The conference brought together several thousand participants representing private industry, public agencies, and professional organizations. Many were the nation's leading experts in home financing, neighborhood planning, zoning, home design and construction, domestic science, and methods of prefabrication. Prominent planners who were involved in the discussion and research of the various committees, included Henry Wright, Harland Bartholomew of St. Louis, Jacob Crane of Chicago who was then president of the American Institute of City Planning, and Thomas Adams who headed the New York Regional Survey, and Harlean James who headed the American Civic Association. Numerous architects were involved, including a number who had been involved in the small house movement, such as William Stanley Parker of Boston's Small House Service Bureau, or had worked collaboratively on garden-city projects, including Radburn's architect Frederick L. Ackerman, and Charles Cellarius of Cincinnati, Edmund B. Gilchrist of Philadelphia, and Eleanor Manning of Boston who had all designed housing groups for Mariemont. The conference focused on all aspects of housing reform, including advances in professional theories for home construction and community planning, and the development of national standards for subdivision design, large-scale development housing, and community enhancement. The greenbelt towns would become the proving grounds for many of its recommendations.

One of the major outcomes of the conference was the overwhelming endorsement of Clarence A. Perry's Neighborhood Unit Plan by several committees, particularly those concerned with planning and zoning issues and subdivision layout. Perry underscored the importance of community planning and called for decentralization of residential development into neighborhood units having four essential neighborhood functions: an elementary school, parks and playgrounds, local shops, and residential environment. He recognized a number of successful models of planned communities, including Forest Hills, the Russell Sage Foundation-supported community where he lived; Kohler, Wisconsin, a company town the initial planning of which involved Peets and Hegemann; Roland Park in Baltimore, a streetcar suburb developed by Edward Bouton; the expansive Country Club District in Kansas City developed by community builder J.C. Nichols; Mariemont, Ohio, the planned garden community designed by John Nolen; and Palos Verdes, California, a residential community of upper-income homes planned by the Olmsted firm. In his 1929 monograph, Perry drew special attention to the new town of Radburn, New Jersey, which was to become a "town for the motor age" and whose planners had seized upon the concept of planning in neighborhood units as a way to safely accommodate the automobile and create a pedestrian-scale community for mixed-income residents.[122]

Perry's Neighborhood Unit Plan (NUP) would become the common denominator that linked the design of the four greenbelt towns to the Radburn plan, the seminal town for the motor age. Furthermore, in giving material

[121] Herbert Hoover, Foreword, in *Planning for Residential Districts*, ed. John M. Gries and James Ford, vol. 1 (Washington, D.C: President's Conference on Home Building and Home Ownership, 1932), pp. xi-xii.

[122] Scott, p. 284; Perry, "The Neighborhood Unit," pp. 31-32.

form to Perry's theoretical model, the greenbelt towns would exert their greatest influence on American community planning. The design team for each greenbelt town would interpret Perry's concept and, to varying degrees, draw from the Radburn Plan. Outlined in great detail in the seventh volume of the *Regional Survey of New York and Its Environs* (1929), Perry's plan called for communities large enough to support an elementary school, preferably about 160 acres with ten percent reserved for recreation and park space. Interior streets were to be no wider than required for their use with cul-de-sacs and side streets being relatively narrow. Community facilities were to be centrally located. Instead of placing the shopping district at the edge of the village, however, Greendale's planners gave the commercial center central prominence more in keeping with the model of the American small town.

As far as the President's conference was concerned, the development of Radburn in the several years preceding the conference was particularly timely, offering solutions to many of the problems facing planners, developers, and builders, at a time of great economic uncertainty. The community was still under construction in December 1931, although sales and plans for future expansion had slowed due to the economic depression. Radburn provided a tangible demonstration of Perry's neighborhood formula and was praised as a dynamic and highly successful model of a self-contained garden community offering a wide variety of moderately priced homes. Its innovative plan, called the Radburn Idea, involved laying out the community in superblocks, turning the external agricultural belt into an internal green, on which homes fronted, and creating a hierarchy of roads and paths accommodating automobiles and pedestrians on separate circulation systems. Although the plan received international acclaim as an ideal model of garden-city planning and attracted the attention of the officials overseeing the design of the government-sponsored greenbelt towns during the New Deal, it was not readily embraced by the entrepreneurial and professional interests that made up the nation's real estate community. Instead, it was Radburn's practical demonstration of the economies of building a suburban community as a large-scale enterprise, with attractive small dwellings, parks and yards of native trees and shrubs, and community facilities that would capture the imagination of the conference attendees and influence the FHA's earliest standards. The greenbelt towns offered a venue for incorporating and advancing the Radburn Idea at the same time demonstrating a wider range of design options, including those being formulated for the privately-funded and -financed FHA-approved subdivisions.[123]

The conference involved a wide range of professional interests through the assignment of committees to study the nation's most pressing housing issues. Numerous recommendations were made for long-term reform and the committee reports were published in a series of volumes addressing concerns such as planning for residential districts and house design and construction. The Committee on City Planning and Zoning, chaired by Frederic A. Delano, a Chicago industrialist and the former chairman of the Regional Plan of New York, endorsed Perry's neighborhood unit as a self-contained community within boundaries formed by major streets to maintain desirable housing standards and real estate values. It pointed out the importance of the community having as its focal point a group of community facilities centering about the elementary school and that multiple-family dwellings, shopping centers, and commercial establishments be located on or immediately adjacent to boundary thoroughfares. The committee endorsed deed restrictions as the primary means for controlling the physical character of a neighborhood, excluding nonresidential activities, and maintaining real estate values. By 1930, this tool had been widely used by community builders, who were well organized in the National Association of Real Estate Boards, to ensure the long-term preservation of neighborhood values in the communities.[124]

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[123] Linda Flint McClelland, Paula S. Reed, and Edith B. Wallace, "Revisiting Radburn: 'Where Art and Nature Combine to Make Good Living Conditions,'" *New Jersey History* 123, nos. 1-2 (spring/summer 2005): 89-90.

[124] Report of the Committee on City Planning and Zoning, in *Planning for Residential Districts,* Gries and Ford, eds., pp. 6-11, & 42-44. Delano, a railroad executive from Chicago, had been supportive of Daniel Burnham's Chicago Plan of 1906 and in 1931 chaired the National Capital Park and Planning Commission; he was an advocate for broad regional planning and would be called upon in the New Deal era by his nephew, President Roosevelt, to chair the National Resources Planning; in this capacity he would set

With an emphasis on planned communities, the Committee on Subdivision Layout, chaired by St. Louis planner Harland Bartholomew, defined the ideal neighborhood as one protected by proper zoning regulations, where trees and the natural beauty of the landscape were preserved, and where streets were gently curving and adjusted to the contour of the ground. Jacob Crane, Henry V. Hubbard, Henry Wright, and John Nolen were members of this committee. Radburn was offered as an innovative example and the joint report of the committees on city planning, subdivision design and landscape planning and planting was prefaced with a caption of an unidentified picture of Radburn announcing: "Recent developments in subdivision practices are producing desirable homes with ample open spaces at reasonable low cost."[125]

Spaciousness was viewed as an essential quality of subdivision design and a leading factor in support of the decentralization of residential communities beyond the central core of the nation's cities. The committee concerned with subdivisions stated:

> Spaciousness is a controlling principle in good land development for American homes. City conditions have robbed most of us of the great satisfactions once derived from the big yards and public commons of even the primitive early village, and now every good citizen is trying to help us regain some of that lost spaciousness. It can be regained in large measure, without undue cost, if subdivisions are planned carefully to that end. Large lots, or lots large as is economically feasible, are always desirable. The introduction of open spaces is equally important, and they may range from the smallest garden or play areas to huge parks. Any tract of land will, by careful design, yield far more spaciousness in effect and in use than thoughtless layout makes possible.[126]

The best practice in designing a subdivision, according to this committee, was coordinating the following in one cohesive plan: the streets, parks, school sites and playgrounds, business districts, public buildings, service garages, as well as a variety of types and sizes of lots. "Each prospective building site should be adjusted to the topography and should be oriented to the sunlight, and should preserve and enhance the elements of natural attractiveness." The committee recommended a hierarchy of streets, consisting of major roads, such as those in the business district, that were wide and secondary roads that were comparatively narrow. Water and sewer mains were to be placed under the roadway. Above all, neighborhood planning offered many advantages—for the residents it provided amenities for a satisfying home environment and community life, and for the subdividers it offered opportunities to capitalize on the economies of design and establish a "permanent monument to the subdivider's work."[127]

The profession of landscape architecture was well-represented at the conference, both by planners who had been trained in this discipline and by practitioners with specialized interests in horticulture and gardens. The recommendations of the Committee on Landscape Planning and Planting, chaired by Josephine S. Morgan, acknowledged the involvement of these designers in building the nation's most desirable suburbs and designing civic improvements, such as parks and parkways, that provided pleasure, order, and recreation for those living in or near the nation's burgeoning metropolises. The committee included illustrious members of the landscape architecture profession, many concerned with the planting of suburban home grounds and neighborhoods, including Arthur A. Shurcliff, Myrl E. Bottomley, Rose Greeley, Jens Jensen, Albert D. Taylor, Bremer Whidden Pond, J. Horace McFarland, Warren H. Manning, Earle Sumner Draper, and representatives of the

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up the Central Housing Committee. Thomas Adams, Harlean James, Harland Bartholemew, Charles W. Eliot 2d., and James Ford were members of this committee.

[125] Report of the Committee for Subdivision Layout, in *Planning for Residential Districts,* Gries and Ford, eds*.,* pp. 52-54, 59, & 76. The photograph and quotation appeared opposite the volume's title page.

[126] Ibid., pp. 52 & 53.

[127] Ibid., pp. 53 & 58.

American Civic Association, Garden Club of America, Woman's National Farm and Garden Association, National Council of State Garden Club Federations, and government horticulturalists and extension agents. The committee pointed out the value of attractive yard design and landscape plantings for increasing a homeowner's pleasure as well as property values. The text celebrated the beauty of trees and advocated for preserving existing trees and recommended that new plantings along streets and highways be compatible with existing vegetation and be "made of the same materials, native to the soil and climate, and still better, native to the locality, so that it expresses the locality."[128]

The Committee on Design, chaired by William Stanley Parker, president of the Boston Architects' Small House Bureau, examined housing conditions nationwide and called for improvements in small house design, the greater involvement of architects in sound house design, and the arrangement of houses in well-planned groups that benefited from fresh air, sunlight, and outdoor space and avoided the monotonous repetition of houses placed uniformly on crowded narrow lots. Members of the committee were for the most part architects who represented diverse sections of the nation. A number had considerable experience in the design of small houses and garden-city principles, including Frederick Ackerman, Henry Wright, Edmund Gilchrist, Charles Cellarius, and Philip Small. The committee stressed the importance of neighborhood and endorsed the concept of group housing, suggesting that a variety of dwelling designs be offered to suit differing family needs and that several different stock plans be offered for each type. Such variation had been at the root of the success of the small house movement. The committee called attention to the group housing built at Mariemont, Sunnyside Gardens, Radburn and the World War I communities as guideposts for future design. The committee disparaged home building on long narrow lots, as well as the two-family houses where one unit was placed above the other and the dwelling extended deeply into a city lot. Instead the committee encouraged the construction of multiple-unit rows and methods of lowering construction costs while providing for sound design. The committee's recommendations were highly critical of building practices and crowded neighborhoods which resulted from speculative interests and in time would to contribute to urban decay and blight.

As a counterpoint to such practices, the committee's report called attention to the advantages of sound architectural design:

> A higher standard of design, consistent with economy, exerts a powerful influence for the better on family life. It opens up new vistas in domestic living, contributes towards increased pleasures and happiness, and furnishes a strong incentive towards home ownership. By providing a permanent, finer, and more convenient environment, better design helps to relieve the pressure of life in our towns and cities, rendered discordant as so many of them are by the complexities of industrial activity. In particular, we must plan our districts of low-priced residences properly to take care of the automobile, with regard to its storage and its movement, as is already being done in a few developments.[129]

The Committee on Design was not alone in promoting the merits of group housing. The Committee on Large-Scale Operations, chaired by Alfred K. Stern, director of the Julius Rosenwald Fund, examined the design and economics of multi-story apartment houses such as Michigan Boulevard Garden Apartments in Chicago which the Rosenwald Fund had financed to provide moderate-priced housing for African American families, the grouped row houses at Chatham Village sponsored by the Buhl Foundation, as well as the efficiently arranged

[128] Report of the Committee on Landscape Planning and Planting, in *Planning for Residential Districts,* Gries and Ford, eds., p. 194.

[129] Report of the Committee on Design, in *House Design, Construction and Equipment,* John M. Gries and James Ford, eds., vol. 5 (Washington, DC: President's Conference on Home Building and Home Ownership, 1932), pp. 5, 10 & 11. Henry Wright was the committee's research secretary, and it is no coincidence that the committee's report reflected his own analyses and opinions on the matter—many appeared several years later in Wright's *Rehousing Urban America* (1935).

small houses designed by Henry Wright and Frederick L. Ackerman at Radburn. This committee was largely concerned with housing reform for the nation's poorest groups, and its meetings became a sounding board for the growing concerns for forestalling and eliminating urban blight—concerns that the housing reformers and the social minded New Dealers would continue to debate and attempt to tackle in the years that followed. To a greater extent than other committees, this committee aggressively examined the issue of reducing construction costs while maintaining a healthy standard of housing and encouraged the construction of housing on a large scale for both owner-occupied dwellings and rental housing, including row housing groups and apartment buildings. In the volume of the conference proceedings entitled *Slums, Large-Scale Operations, and Decentralization*, editors John M. Gries and James Ford wrote that the principles of constructing multi-family dwellings were "just as applicable to the production of single-family houses in groups," and were "matters of moment to all developers." The "heavy responsibility for housing," they claimed rested on the "shoulders of business" being essential for "its own security and continued growth" not just the "common good."[130]

With an emphasis on cost-analysis, this committee considered a wide range of successful multiple-unit developments that had accommodations for lower-income, working-class residents, including Mariemont, Radburn, Sunnyside, Chatham Village, and even one of the most highly respected World War I examples—Seaside Village. Appended to the committee report were several useful studies, including "Experience with Large-Scale Operations," which examined the nation's experience with large-scale operations and included Henry Wright's exhaustive cost analyses for Radburn demonstrating the advantages inherent in designing a large-scale community on garden-city principles. These cost reductions were shown to result not from mass production or improved techniques of construction, but instead from the orderly layout of a community with only twenty-one per cent of the land being covered by streets and lanes (a reduction of ten percent over the normal amount of land used for roads). Additional savings stemmed from the completion of one part of the community before building up another. Another appendix provided the cost analysis for Chatham Village in Pittsburgh, a housing development for clerical workers financed by the charitable Buhl Foundation.[131]

Other committees made recommendations aimed at raising the quality of the nation's housing and encouraging community enhancements. The Committee on Construction devised a score card, which provided the foundation for the rating process later used by architects, realtors, underwriters, and appraisers in determining whether or not a property qualified for Federal mortgage insurance. The Committee on Utilities pointed out the "attractiveness" of a residential area would be marred unless electric and telephone wires and poles were placed underground. The Committee on Farm and Village Housing drew attention to the desperate need for better rural housing and "village planning for individual comfort and social efficiency."[132]

The Federal government's interest and involvement in matters relating to housing increased in the years following the President's conference. The creation of the Federal Home Loan Board under President Hoover in 1932 was the first step towards organizing the banking industry to make long-term home mortgages available. It was under the Roosevelt Administration and the New Deal that a number of programs aimed at closing the housing gap were launched. Foremost was the creation of the Federal Housing Administration, which established national housing and neighborhood standards and provided mortgage insurance on privately funded

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[130] *Slums, Large-Scale Operations, and Decentralization,* vol. 3, John Gries and James Ford, eds., President's Conference on Home Building and Home Ownership (Washington, D.C.: National Capital Press, 1932), p. xv. Many of these issues would be addressed in Wright's *Rehousing Urban America* (1935).

[131] John M. Gries and James Ford, eds., *Slums, Large-Scale Operations, and Decentralization*. The study on large-scale construction appeared in Appendix I, pp. 96-105. The Chatham Village analysis appeared in Appendix VI, pp. 138-42.

[132] *House Design, Construction, and Utilities*. p. 135, plates facing p. 13.; Bruce Melvin, "Report of the Committee on Farm and Village Housing," in *Farm & Village Housing,* John Gries and James Ford, eds., vol. 7. (Washington, D.C: President's Conference on Home Building and Home Ownership, 1932). The recommendations of this committee led to the Subsistence Homesteads program of the PWA which was absorbed into the RA's Rural Resettlement program.

loans to developers and prospective homeowners, and was one of the most enduring outcomes of the President's Conference on Home Building and Home Ownership.

Economists of the day and members of Roosevelt's Brain Trust understood the value of stimulating the home building industry and encouraging private investment in modernizing existing homes, as well as new construction. Measures were introduced to solve the short-term economic crisis by funding civic improvements and engaging various sectors of the unemployed public in meaningful constructive work. Alongside these efforts the Federal government initiated major solutions to the long-term problems of home financing, eliminating urban blight, and creating communities that mirrored the best practices and ideals that had been examined in the 1931 conference. To some degree each of these projects incorporated neighborhood unit planning and was concerned with providing a healthy, sun-filled, environment and establishing community amenities that would bring people together and provide for recreation. Several pieces of legislation affected lasting solutions and became cornerstones of American twentieth-century public policy. Other programs, including suburban resettlement, became controversial and sparked concerns over the legality and constitutionality of their activities.

Despite the favorable terms offered by the new FHA-insured mortgages, few developers were able to invest in large-scale development. Implementing these ideas and demonstrating that the creation of ideal decentralized communities for lower-income Americans was possible became the goal of the Suburban Resettlement program. The design and construction of greenbelt towns occurred at the same time that the FHA was perfecting national standards for neighborhood and small house design, and was promoting its own program of privately financed but Federally approved large-scale developments of rental apartments. As a result Greendale became one of the nation's first large-scale residential developments to reflect this formative period in the development of national standards for neighborhood planning and lower-cost, small house development.

The Design of Greendale and the Other Greenbelt Towns

In 1944, Community Manager Walter Kroening named three motives for the planning of Greendale:

> (1) To give its residents some advantages of both city and country life in a community so protected that time would not produce the usual run-down neighborhood; (2) To provide for families of moderate income, good housing at low rents in an environment conducive to healthful, wholesome living; (3) To ease the severe unemployment that existed in the building trades and allied industries at the time of construction.[133]

In fulfilling these three motives, Greendale and the other greenbelt towns represent one of the most significant and controlled American experiments in garden-city planning. Incorporating most of Ebenezer Howard's recommendations for physical design as well as social reform, these towns conformed more closely to the garden-city ideal than any other planned communities in the United States. Each town was comprehensively planned and limited in size and population. The general layout of each greenbelt town was in keeping with Howard's diagram, composed of an administrative and commercial core surrounded by residential areas, interspersed with parks, and encircled with a greenbelt. Each town was held in trust by a single land owner (the Federal government) and its properties rented to tenants until the towns were sold in the 1950s. The people governed each town through municipal incorporation and numerous citizen committees. Finally, the residents organized cooperatives to create and maintain the early businesses and institutions. All of these elements combined to create three towns whose existence presented a radical challenge to fundamental patterns of

[133] Walter E. Kroening, "The Story of Greendale: A Government Demonstration in Community Planning and Public Housing," April 1944, typed manuscript, Greendale Historical Society.

growth, real estate practice and political organization, in a country where growth and development had historically been based on private investment, initiative, and individualism.

Although all three towns reflect Howard's ideal to a great extent, Greendale's greenbelt was most successfully farmed. Greendale had sixty-five farms, most in dairy, small truck or poultry production. These farms remained in operation until the Federal government sold the greenbelt in 1952. In contrast, Greenhills had sixty-two farms, and Greenbelt had seven.[134] Greendale was the only town with land set aside for industrial use, although that section of the plan was not completed during the period of Federal ownership. Cooperative organizations flourished initially in all three greenbelt towns. The Greendale Cooperative Association opened and operated several early businesses, but dissolved in 1948 when the Federal government refused to renew its leases. Other cooperative efforts included the Greendale Credit Union, the Greendale Dairy, and the Greendale Health Association (later a part of the Milwaukee Medical Center). Unfortunately, the cooperative dairy operations at Greendale were short-lived, and the ideal of a rural village surrounded by farmland and open space was lost at Greendale as in the other greenbelt towns after WWII when the Federal land sold. In contrast, Greenhills Consumer Services was still in operation as late as 1971, but in much diminished form, while Greenbelt Consumer Services continues to operate. Finally, the efforts of a citizen group to purchase Greendale and manage it as cooperative housing were rebuffed by the Federal government, perhaps because more than half the dwelling units at Greendale were single-family houses and a survey of the residents had shown that the majority wished to purchase their homes. Conversely, the government sold the housing in the original sections of Greenhills and Greenbelt, almost all of which was multi-family, to local cooperative homeowners associations.[135]

The Greendale Plan

Appealing to the design profession in 1935, essayist and RPAA member Lewis Mumford wrote: "Our task is not merely to build houses, but to build communities; indeed, the house cannot function as a living place unless it is set in a healthy communal and natural environment." Greendale's plan was intended to give material form to the Garden City ideal interpreted by Mumford in 1935. It achieved this by adopting the Neighborhood Unit Plan and some of the innovations demonstrated at Radburn.[136]

In keeping with Clarence Perry's neighborhood unit concept, Greendale's plan focused on family safety and convenience, placing all the housing in the original section within one-half mile of both the school and the village center, siting the village adjacent to major roadways (West Grange Ave. and Loomis Road) but not allowing them to pass through the original section, and setting aside one-third of the land in the original section for parks and recreation (a figure that has been maintained as the village has expanded). Elbert Peets and Jacob Crane took into account the site conditions and the population characteristics of Greendale in their interpretation of the three major elements of the Radburn Idea: the superblock, measures to safely accommodate the car and provide for pedestrian circulation, and the reverse-front house plans.

Elbert Peets deliberately departed from the Radburn superblock in his design for Greendale for three reasons. First, he wanted to preserve the existing topographic features and mature trees as much as possible, for their

[134] The farms associated with the greenbelt towns were short-lived, and at best some of the acreage in these reserves was transferred to park authorities while the remaining land was subdivided in a manner indicative of 1950s neighborhoods and apartment complexes**.** By 1940, Greenbelt's farms were no longer in agricultural use, according to "Greenbelt Communities," (Washington, DC: U.S. Department of Agriculture, Farm Security Administration, 1940), p. 5. Greendale, having a successful dairy cooperative, retained its agricultural use through the 1940s; the village organization conducted a planning process that involved one of the original planners and found a compromise amidst the decade's pressures for massive suburbanization maintained in the form of higher-priced spacious neighborhoods on gently curving lanes which to a large extent preserve the area's rolling topography and canopy of trees.

[135] Alanen and Eden, pp. 32 & 83; "Greenbelt Communities," p. 12; Arnold, pp. 92 & 180-81; Lampl, p. 8.5.

[136] Lewis Mumford, Foreword, *Rehousing Urban America,* by Henry Wright (New York: Columbia University Press, 1935).

beauty and to save funds that would otherwise be spent grading the site. The principal natural feature on the site is Dale Creek, which meanders southward through two of the superblocks. Organizing the parks around Dale Creek and its wooded banks created a linear greenway, which Peets expanded in an informal, naturalistic manner to create Greendale's flowing and continuous park system. As Clarence Stein commented, "Greendale is superbly related to its natural site."[137] Second, Peets firmly believed "every house should have its patch of ground, with a fence around it."[138] For this reason, he laid out a private yard for each dwelling, whether it be a single-family detached house or the one-bedroom unit of a row dwelling. Third, Peets wanted to orient the dwellings to take advantage of prevailing summer breezes, provide shelter from the north winds, and maximize exposure to the sunlight throughout the day. To accomplish this, the residential lanes were arranged to run north and south, so that the row housing and semi-detached twin units could be placed with the long axis running north-south, and each lane of single-family houses could reflect a consistent relationship between the building, street and yard, and provide each house with privacy and the most beneficial orientation to sunlight. This arrangement allowed Peets considerable flexibility in design, while introducing measures that reduced construction costs, such as arranging houses close to the street to reduce the cost of installing utilities.[139]

Instead of adopting the superblock as the basic planning unit throughout the village, Greendale's planners integrated a variety of planning strategies, including those practiced by the community builders of the 1920s for more expensive neighborhoods and favored by the newly-established Federal Housing Administration (FHA) as most desirable for residential neighborhoods of small homes. The collector streets, Northway, Southway and Broad St., divide Greendale into three, irregular sections. Only a portion of the area east of Broad St. was laid out as a superblock, with Northway and Southway serving as peripheral roadways and series of short courts with cul-de-sacs extending into an internally located swathe of Dale Creek Park. Elsewhere narrow residential lanes cut into, and sometimes through, the residential areas, carving the community into a highly varied and ever-changing array of streetscapes, parks, and private yards. Housing is clustered along the residential lanes, leaving spacious yards and in a few cases broad swathes of parkland between the streets. Greendale's parks flow through and skirt the edges of each residential block and are made accessible through an intricate network of pedestrian paths.

Greendale's automobile and pedestrian circulation systems are largely separate, as they are at Greenbelt (but not at Greenhills). The roads are hierarchical, consisting of broad collector streets between the residential areas and narrow residential lanes, many of them cul-de-sacs, which extend outward from the collector streets. Although sidewalks are found along the collector streets, each residential lane possesses only a very narrow sidewalk, encouraging pedestrians to use the pedestrian pathways. These are paved and thread behind and between the yards, and through wooded parkland, initially providing every home with a traffic-free walk to playgrounds, school, and the village center. Parks and playgrounds can be reached without crossing a single street, and the school and the village center were accessible from any home by crossing no more than one collector street. As budget constraints did not permit the construction of under- or overpasses, all-way stop signs were placed were collector streets intersect, and buildings were set back from the intersections (and very little housing overlooks the collector streets), providing drivers and pedestrians with expansive and unobstructed views. The fact that there has never been an automobile-pedestrian fatality in Greendale's nearly seventy-five year history testifies to the effectiveness of the design and to the appropriateness of the nickname Jacob Crane gave the community, "Safety Town."

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[137] Clarence Stein, *Toward New Towns for America* (New York: Reinhold Publishing Company, 1957), p. 186.

[138] Peets, "Greendale," p. 220.

[139] Elbert Peets, "The Orientation of Row Houses," in Spreiregen, ed., pp. 199-201. In this 1960s essay, Peets advocated placing the length of the building slightly northeast-southwest to maximize the beneficial effects of sunlight. See also Alanen, "Elbert Peets: History as Precedent," p. 206.

One of the most highly prized elements of the Greendale plan is the manner in which residential lanes and courts flow off the collector streets and create small, unified clusters of homes interspersed with land reserved for common park use. The street plan draws from the best practices of subdivision design of the day and integrates a combination of influences—including the cul-de-sacs of Radburn, formal City-Beautiful inspired symmetrical courts, and long curvilinear blocks that had been inspired by the nineteenth-century designs of Frederick Law Olmsted, and had been improved upon by prominent landscape architects Henry Hubbard, Arthur Shurtcliff, Charles Robinson, Herbert Hare, and Sidney Hare in the twentieth century. When Albert Mayer, an architect for the ill-fated Greenbrook project and a leading proponent of garden-city planning, reviewed the progress of the greenbelt towns in the *Journal of Housing* in 1966, he praised the design of Greendale's circulation system as "ingenious."[140]

Solutions for the design of safe neighborhood streets took on critical importance in the 1930s as public agencies promoted neighborhood unit planning and endorsed designs that, while accommodating increasing automobile use, were deemed safe and convenient for pedestrians. Special provisions for the automobile resulted in special areas designated for parking. The village center provided off-street parking in front of and behind the shopping center on the west side of Broad St., while garages and car-length driveways provided parking on residential streets. At the same time Peets and Crane were working out the plan for Greendale's streets, Seward Mott, the chief planner of the Federal Housing Administration's small house program had just published the first standards for neighborhoods that would qualify for FHA mortgage insurance—standards that emphasized a hierarchy of streets, roads built to follow the natural topography, and a carefully planned web of long, curvilinear streets and short cul-de-sacs and courts.

Commenting on the distinctive formality apparent in the Greendale plan, planning scholar and professor Arnold R. Alanen has written: "In many ways, the Greendale plan represents the essence of Peet's style and approach. He disliked the curvilinear suburban streets and sweeping lawns then in fashion. Greendale was 'built around a line instead of a point,' with its street pattern delineated by a central boulevard, Broad Street."[141]

Landscape design was a highly important aspect of the Greendale plan. Concerted effort was put into creating a country-like setting through the design of architecture, a system of pedestrian paths, fences and hedges, and landscape plantings at Greendale. A Farm Security Administration pamphlet declared: "With the help of time and planting we trust that a charming but very simple village atmosphere will be attained."[142] Peets drew from the best conventions of the landscape architecture and horticulture professions. Following the lead of Radburn's landscape architect, Marjorie Sewell Cautley, he similarly encouraged the construction of trellises, fences, and garden gates and the planting of vines, shrubs, hedges, and ornamental fruit trees. According to Professor Arnold Alanen, Peets took charge of the planting program: "Plants were chosen not only for beauty but for their screening potential. Protection and lot boundaries on all sides would be created with plantings. Hedges or small trellises with vines would provide a barrier between the entrance court and the street."[143]

Peets, whose individualism and independent thinking had already shaped his reputation as a designer, did not conform to prevailing ideas about limiting his palette to plants and trees native to the Midwest. When challenged for his use of plants considered "exotic" by Jens Jensen, the leading proponent of the Prairie Spirit of landscape gardening, which had flourished in the Midwest since the early twentieth century, Peets argued on historical grounds that residents "will see the trees and shrubs that have been made dear to them by familiarity. The golden-twig willows were planted by the pioneers to cheer the winter landscape, apple and cherry trees,

[140] Albert Mayer, "Greenbelt Towns Revisited (part 2)," *The Journal of Housing* (February 1967), p. 83.
[141] Alanen, "Elbert Peets: History as Precedent," p. 206.
[142] Farm Security Administration, "Greenbelt Communities," p. 3.
[143] Ibid., p. 207.

lilacs and hollyhocks—all of these came from other continents, but we want the people who come out of their new homes in Greendale to find these old friends."[144]

Through a highly creative site plan for a single home and yard (Figure 15), which Alanen has named "chain house" siting, Peets extended the design of each house outward to an organized plan for the entire parcel that provided an entry court and a detached garage, off-street parking, and front and rear gardens. Highly distinct and innovative, Peet's design was repeated from house to house and create a "chain" effect along long, curvilinear streets such as Basswood St., Arrowwood St., and Clover Lane. The single-family dwellings display, using the neighboring garage to form an entry court between each pair of houses, with the principal entrance into each house through the court on the house's south side. By setting the garage perpendicular to the street, to the side and in front of its respective unit, Peets created a court for each twin dwelling, with the principal entrance again through the court. Peets referred to the court as a "*Hof*," a term used in Germany to refer to the space around which buildings in European farm villages were arranged. Just as was the case in those farm villages, the principal entrance into each single-family house in the original section of Greendale faces the court, rather than the street, giving the resident privacy going between her car and home.[145]

As Peets explained:

> The house-lots are planned very simply. Our intention has been to supply the essentials and to leave the tenant to work out the details to suit himself.... In the single-house lots there is normally a little service yard at the utility room door. The "entrance-court" between one house and the next usually has a bit of planting to screen it from the street, and always some planting against the north wall of the neighbor's house. Back of the house is the house-lawn, limited by the flanking garages. This is the place where clothes will be dried; there are clotheslines hooks on the garages and usually a clothes post in the lawn. The rear part of the lot is left unseeded; the tenant may make it into a fruit and vegetable garden or use it for flowers or a lawn.... As a guide in making planting plans each—or the average—unit was assigned these plants; two shade trees, three fruit trees, thirty shrubs, and ten vines.[146]

Peets's design for the chain house derived in part from the recommendations of the 1931 President's conference and was spurred by the increasing interest by landscape architects in designing the grounds of small American homes as the Depression worsened and estate commissions disappeared. The portion of the design visible from the street consisted of a narrow setback from which a projecting one-story vestibule provided entry to the interior of the utility room and kitchen and a courtyard set to one side of the house that included a driveway, shed, and one-car garage. To the rear of each house lay a private yard with space for a vegetable garden, a lawn, specimen trees, and a hedge to enclose the yard and provide privacy. The houses were originally planned so that the wall of one house served as the edge of the service yard of the house next door. A distinct feature of the Greendale plan was to form this arrangement on north-south streets so that the service side elevation of each house faced the south for best exposure to wind and sun.

Peets's innovations achieved cost-savings by situating homes on long narrow lanes, reducing the distance that houses were set back from the street (and therefore reducing the cost of installing utilities), and limiting the width of sidewalks and placing them on one side of the long linear streets. Other measures to reduce costs included limiting house construction on main roads, clustering courts and cul-de-sacs of various lengths at the edge of parkland, and placing pedestrian paths at the end of the courts rather than along the rear of each private

[144] Alanen, "Elbert Peets: History as Precedent," pp. 206-207.
[145] Alanen and Eden, p. 42; Peets, "Greendale," p. 220.
[146] Elbert Peets, Report of the Town Planning Section of the Greendale Planning Staff, vol. 2 [Washington, D.C.: Farm Security Administration, 1947], pp. 55-56.

yard. In this way Greendale's planners ingeniously molded the streets to the natural topography of the site and adapted the housing groups to the preferences of prospective tenants as determined in the Milwaukee-area survey.

While Peets focused on the placement of structures and buildings to shape the landscape and dictate its domestic use. Harry Bentley viewed his structures as incomplete without the ambiance that a coherent plan of plantings would provide over time. He wrote:

> Our concept of Greendale as a town of interest and simple beauty will not be realized until plant materials have had time to grow. No matter how good the design of the small house, it will look new and temporary until it is wedded to its piece of earth by well-rooted trees and shrubs and vines. Trees already existing have been carefully preserved and certain house groupings in which they appear give a key to the settled character that will prevail after a few years growth of the newly planted nursery stock.[147]

Equally important in defining village character was the unifying architectural program. Bentley described how the economies of eliminating non-essential features gave new meaning to the aesthetics of house design:

> As the need for economy forces the elimination of non-essentials, the vocabulary of architectural expression becomes limited: at Greendale it consists largely of the texture and color of materials chosen for their permanence and low maintenance costs and of the shape into which they are assembled.... The general visual character of the town expresses itself in the color contrasts of the masonry walls and of wall and roof—in the mass-contrasts of single houses, twin buildings and rows, or of one-story, story-and-a-half and two-story buildings—in chimneys breaking through the roofs or carried up on the walls—in the contrast between hip-roofs and gables.[148]

Peopling Places: Reducing Costs and Architectural Innovation

In addressing the economic situation and shortage of housing in 1935, Lewis Mumford wrote:

> America faces today both a quantitative and a qualitative deficiency in housing. Part of this deficiency is due directly to poverty, and can be remedied only by the industry's provision for a higher income for lower-wage groups, or by governmental subsidy that will meet the difference. The remaining deficiencies are due chiefly to the attempt to make out of the essentially cooperative, communal task of housing, a field for individualistic enterprise and private profit....Nothing but a concentrated effort, in a direction exactly opposite to that taken before the depression by business enterprise and realty speculation and urban engineering can overcome our vital deficiencies in housing.[149]

Mumford's words reflected the ideology of the RPAA and especially its leader Clarence Stein. To a large extent RA Administrator Rexford Tugwell shared this philosophy finding it compatible with his own opinion about the necessity of Federal intervention in matters concerning housing and residential development. In the early years of the New Deal, Stein visited many offices seeking support for a Federal Garden City policy and for support for several of his projects. In June of 1935, Stein was invited to meet with government housing officials at the Buck Falls Farm in Pennsylvania where he had the opportunity to garner support for his ideas. In Fall of that year, 1935, Stein was in Washington as a consultant to the Resettlement Administration laying the groundwork

[147] Harry H. Bentley, "Residential and Non-residential Construction, Greendale, Wisconsin," January 31, 1936, pp. 99-100.
[148] Harry H. Bentley, "Residential and Non-residential Construction, Greendale, Wisconsin," January 31, 1936, p. 97.
[149] Mumford, Foreword.

for the rapid execution of the greenbelt towns. He developed a series of reports containing cost analyses relative to the construction and improvement costs for various house grouping schemes, community facilities, and shopping center. He also examined the overall costs of operating and maintaining the community over time and addressed budgetary concerns that affected residents, such as rents and amortization charges. According to Stein, "The purpose of the studies was to indicate a broad and practical method of approach to inter-related problems of social, economic and physical planning. It was felt that they were needed because the conception and design of a complete town to be built quickly were new subjects to most of the technicians involved." This effort was directed toward keeping costs within the scope of the allotted funds for each town, as well as fostering a collaborative relationship in which architects and planners could work together and where architectural concerns were better integrated with the planning concerns of the entire community.[150]

Stein's report on the capital costs of house construction included comparative data on relative costs that were highly specific and based on actual floor plans, room dimensions, and interior amenities. The basic dwelling was to consist of the kitchen, bathroom, stairs, dining and living space, one or more one- or two-person bedrooms, and space for heating and storage (e.g. closets). Housing units were to be designed with adequate ventilation, light, sanitation, and cleanliness, and offer space for personal privacy as well as family activities. The cost appraisals took into consideration all aspects of house and yard design, including materials, labor, equipment for the house (e.g. furnace, lighting fixtures, and kitchen appliances), utilities, roads, walks, and gardens to serve the house when arranged in typical groupings. Underscoring the social and practical purposes of the model communities as demonstrations of moderate cost housing, Stein's instructions emphasized the necessity of containing capital costs to "take care of as many families and persons as possible within the appropriation" and "set standards of planning and building that will be sufficiently economical to serve as a guide to others building in the near future."[151]

Realizing the economies inherent in grouping houses was central to the success of the greenbelt town program. Stein examined the relative improvement costs of various schemes of house grouping in a second report to John Lansill. At Radburn, savings resulted from the grouping of houses, staging the construction in phases, reducing the amount of street pavement, and utilizing economies in the installation of utilities. These measures would be set forth and expanded upon in the design and construction of the greenbelt towns. Stein wrote Lansill: "The purpose of these studies is to measure the comparative efficiency of various methods of grouping houses as affecting street, yard, and park improvement costs.... We have compared: houses facing on main roads and on lanes with and without vehicular roads; similar lanes of different widths; houses in groups of different lengths with and without garages attached, as well as free-standing houses; houses with [the] long and with [the] narrow side towards the road."[152] These improvements constituted the basic infrastructure of street paving, sidewalk construction, curbing, underground utilities and light standards, water mains and fire hydrants, and landscape planting.

Based on his experience at Sunnyside, Radburn, and Chatham Village, Stein offered some general observations about relative costs that help explain the design standards on which each of the greenbelt towns was to be planned. As well as being least desirable for living, the cost per house of improvements was greatest when houses were built facing a main road. The improvement cost for houses built on lanes was thirty-eight percent less than on main roads and decreased even more as the length of the lane increased. Typically, superblocks

[150] Clarence Stein, Appraisal of Plans, 23 November 1935, as reproduced in Appendix, T*oward New Towns*, pp. 228. See also K.C. Parsons, "Clarence Stein and the Greenbelt Towns—Settling for Less," *Journal of the American Planning Association* 58, no. 2 (Spring 1990): 161-83. Stein's plans for Hillside Homes in the Bronx had been constructed with Federal assistance from the PWA's Housing Division and Reconstruction Finance Corporation; in Spring 1935 he was seeking support for his Valley Stream project, an abandoned airport project which was never realized.

[151] Stein, "Appraisal of Plans," 23 November 1935, reproduced in Stein, "Appendix," *Toward New Towns*, p. 232.

[152] Ibid.

1000 feet in width offered savings over blocks half that width, and generally the greatest savings came from the arrangement of row houses on lanes that had grouped garages at the entrance and did not allow vehicles on the lane. Stein recognized, however, that the planners might "prefer to sacrifice these advantages for the convenience of direct access to each house by automobile and greater ease in the delivery of bulky goods and fuel, and easier fire protection." Greendale's planners rejected the idea of grouped garages and non-vehicular lanes, and in contrast to the planners of the other greenbelt towns, they placed exceeding importance on the garage as an essential and integral component of each house and yard.[153]

Stein set forth comparative data for assessing the relative improvement costs of eleven different schemes for grouping houses, which he illustrated in a series of diagrams that could later be developed into site plans to fit the actual conditions and topography of a specific location within the town plan and the domestic needs of prospective residents. Stein's diagrams were all based on a hypothetical two-story, two-bedroom housing unit, called "House Type B-III," which allowed entry through a small vestibule leading to either the kitchen or living room at one end of the house. With the exception of what Stein called "Scheme 2," the diagrams all conformed to the Radburn Idea of situating houses on a service court and providing a public path leading to common park land alongside the garden side of all housing units. Scheme 2, in contrast, offered residents of multiple-unit rows direct access to a garage to one side or the other of the unit.[154] This was the basic scheme adopted for Greendale.

A comparison of Stein's diagrams to Greendale's interesting variety of housing groups on courts, lanes, and streets of different types and lengths, indicates the freedom the greenbelt town planners could exercise in modifying and combining the schemes and even introducing new schemes provided favorable cost-savings could be demonstrated. In contrast to Greenbelt where planner Hale Walker adopted the superblock as the basic unit of planning and adhered to the Radburn-influenced diagrams, Peets and Crane followed Scheme 2 for many of the short rectilinear courts at Greendale and introduced new schemes for curvilinear lanes, derived from the more conventional arrangement of streets in American suburbs, variations that John Nolen had introduced in his plan of Mariemont, and the innovative designs being explored by their colleagues at the Federal Housing Administration (FHA).

Stein's involvement in the preliminary planning for the greenbelt towns was not the only direct connection between the work of the RPAA and the RA. Stein's studies were made at the end of 1935 and presented to the teams when the actual design work got underway shortly afterwards. By January 1936, ground had been broken for Greenbelt at Berwyn, Maryland, and by February 1936 progress was well under way on the actual plans, drawings and models that would guide the early stages of decision-making and lead to the actual construction plans and specifications. Within each team the designers worked collaboratively with the advice of consultants much as Stein and Wright had worked in the design of Radburn and in consulting on the design of Chatham Village.[155] While Stein's work was completed and he was away traveling in Europe, Henry Wright and two other members of the RPAA, Albert Mayer and Henry Churchill, served respectively as chief planner and principal architects for the Greenbrook, New Jersey, project.

The economies of design and construction inherent in large-scale development had been demonstrated by Clarence Stein and Henry Wright in the City Housing Corporation projects at Sunnyside Gardens and Radburn and the University of Pittsburgh study for the Buhl Foundation Project at Chatham Village, in Pittsburgh. Costs

[153] Stein, in Memorandum to John Lansill, "Studies of the relative improvement costs of various schemes of house grouping," 19 November 1935, reproduced in Stein, Appendix, *Toward New Towns*, pp. 232-34.

[154] Stein, "Appraisal of Group Plans," 19 November 1935, reproduced in Stein, "Appendix," *Toward New Towns*, pp. 234-40.

[155] For an explanation of Stein's leadership and management of the design process during the time he worked with Wright and other RPAA designers on Radburn and Chatham Village, see K. C. Parsons, "Collaborative Genius: The Regional Planning Association of America," *Journal of the American Planning Association* 60, no. 4 (Autumn 1994): 462-482.

could be minimized through advance planning and cost-analysis and utilizing the economies of acquiring land and procuring materials on a large scale. Wright, whose early work for the WW I housing agencies entailed cost analyses, had just completed his monumental treatise, *Rehousing Urban America* (1935), in which he presented a scientific approach to cost-efficient housing based on his career-long experience, his admiration for the garden city designs of his contemporaries, as well as his recent analysis of European housing developments. Wright's treatise called for an entirely new approach to residential design—one that was deemed comprehensive, "scientific" in its technical details, and ready for implementation.

After their collaboration on Radburn and Chatham Village, the partnership dissolved and Wright began teaching at Columbia University and, with Catherine Bauer, formed the Housing Study Guild, which in the early 1930s engaged him in a study of European developments in high-density, low-income housing. To him the most interesting possibilities were offered by the work of Ernst May at the Praunheim and Romerstadt projects in Frankfurt, the Neubuhl Houses in Zurich, and the *siedlungs* of Berlin. In *Rehousing Urban America*, he brought together his comprehensive understanding of the evolution of the multiple-unit dwelling in the American garden-city planning with the prospects suggested by the wave of modernism and innovation abroad.

Large-scale projects could be carried out with concentrated effort expended over a relatively brief period of time. A large project could be broken into phased stages so that future construction costs could be offset with income from the sale or rent of completed units. Under ideal circumstances, builders and developers (called "operative builders") could rapidly retire construction loans and move on to new projects. This was the type of development the FHA wanted to encourage through its long-term amortized loans. But in the first few years of its operation, the FHA had few, if any, truly large-scale proposals for neighborhoods of small houses. Instead the FHA turned its attention to working with developers in the creation of large-scale rental housing projects that were privately financed (many by insurance companies) but Federally insured. Eventually with more favorable terms for FHA insured loans (under the Act of 1938), an improving economic situation, and the increasing demand for housing in critical defense areas (under the Lanham Act of 1941), the prospects for private investment in home building on a large scale greatly improved. After the war, with a new G.I. housing bill, private investment in housing and activity in the home-building industry finally gained momentum paving the way for the emergence of large-scale developers, such as Joseph Eichler and William Levitt, who in the 1950s became known as merchant builders.

In the 1930s, the greenbelt towns offered planners, architects, and landscape architects the opportunity to expand on the lessons learned at Forest Hills, Sunnyside Gardens, Mariemont, Radburn, and Chatham Village and give material form to the ideas raised at the 1931 President's conference and the theories of master designers such as Stein and Wright. The designers of the new towns set out to experiment with and demonstrate what would become one of the most important institutions of American life, the comfortable, convenient, and well-equipped suburban home. At Greendale, efforts were directed to two basic housing types—the multiple-unit row dwelling and the detached single-family home.

The Multiple Unit Row Dwelling

The economics of house design and planning had equated large-scale operations with the development of group housing. During the 1920s there was a growing dissatisfaction with the design of ordinary apartment houses due to the sharing of entrances, stairways, and corridors and concerns for maintaining common spaces. Designers such as Henry Wright and Clarence Stein sought low-cost alternatives that could offer residents the privacy of a single home while gaining the economic benefits of multiple-unit construction. Many of the World War I defense housing communities had explored variations in two-unit dwellings, called duplexes, and multiple unit rows. But it was the innovations in multiple-unit dwellings introduced in the American Garden City communities—Sunnyside Gardens, Mariemont, Radburn, and Chatham Village—that sparked interest in

perfecting "twin" and group rows. The earliest section of Mariemont incorporated row house designs by noted architects Edmund B. Gilchrist of Philadelphia, and Richard B. Dana of New York City and clusters of detached and semi-detached houses by a variety of accomplished architects, including Grosvenor Atterbury of New York (who had designed the houses at Forest Hills, New York), Charles F. Cellarius of Cincinnati, Lois L. Howe and Eleanor Manning of Boston, and Carl Zeigler of Pittsburgh.

In the *Design of Residential Areas* (1934), planner Thomas Adams who had written the Regional Plan for New York and participated in the 1931 President's conference, encouraged further investigation into the development of the row house based on an appraisal of three related factors: "the prevailing demand; the relative costs per room; and the necessity that each home have equally good conditions in regard to light, air, and yards for play." He saw the group or row house as a compromise between the detached house and the apartment house, and he acknowledged that there was "much prejudice against group or row houses." Despite the preference for the single home with its gardens on a park-like street, he argued the merits of the row housing type, saying that with proper landscape and architectural design, such houses could be made more attractive than a group of free-standing single homes. He cited the economic advantages: "the group house may occupy a narrower lot without being undesirable from the point of healthful occupation. This should mean a first saving of fifteen to twenty percent in cost of land and local improvements as compared with a free-standing house providing the same amount of living space." He further estimated that a connected group of six houses having only two exterior walls, one at each end as compared with twelve exterior walls of six detached houses, would save an additional savings of five to ten percent.[156]

Henry Wright was the strongest advocate for group housing, having been involved for many years in designing many variations in the form of small apartment houses and multiple-unit housing in the context of a garden suburb. In making his case for group housing, Wright argued: "Group planning assembles buildings and land for effective openness without extravagance." He called for a completely different type of arrangement of subdivision in which lots became longer and shallower to accommodate the grouped row and give each unit exposure to sunlight, fresh air, and pleasing garden views. This meant eliminating dark, narrow alleys between buildings, limiting the depth of each dwelling to two rooms, and placing the dwelling in a garden-like environment. He remarked:

> The choice of kinds of dwelling space provided should be dictated primarily by considerations of privacy, safety, and good exposure. None of the family dwelling types of the past has met all these requirements satisfactorily. Group housing on the contrary is capable of meeting them under intelligent evolutionary development, and only asks to be freed from artificial restrictions whether of law or mental outlook.[157]

With an aesthetic basis in garden-city planning and practical emphasis in cost-reduction and large-scale development, the greenbelt towns became one of several proving grounds sponsored by the New Deal government for the development of multiple-unit housing. The others were the projects of the PWA Housing Division in 1933–35, the large-scale rental housing division of the Federal Housing Administration established in 1935, and the developments by local public housing authorities under the Housing Act of 1937.[158]

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[156] Thomas Adams, The Design of Residential Areas: Basic Considerations, Principles, and Methods (Cambridge: Harvard University Press, 1934), pp. 89-91.

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

[158] The fullest expression of Henry Wright's ideas is probably best represented by the variety of multiple housing dwellings at Greenbelt and the FHA-approved and -insured apartments at Buckingham Communities (NR) in Arlington County, Virginia. Wright consulted on the early planning for the first section of the garden apartment community just before his untimely death in 1936.

In contrast to the European modernism espoused by Wright and Bauer and the understated attempts at modernism in the row dwelling at Greenhills and Greenbelt, the Greendale houses seem highly conventional with their simple references to the Colonial Revival style and orderly, symmetrical appearance. Despite their stylistic references and village-like setting, the Greendale houses were modern houses—not in the sense of style, but more importantly in the fact that their design was a result of spatial concerns for function, comfort, convenience and economy. Most importantly from a garden-city perspective, Bentley's designs incorporated the principle that every home have a private entrance, view, and garden, and be located in an orderly arrangement in a cohesive group on a narrow, quiet residential lane. Landscape plantings and architectural details such as projecting bays, gabled parapets, second-story balconies, and entry porches added variety to each streetscape and relieved the regimentation and monotony often associated with group or row dwellings. From the perspective of modern innovation, the designs adhered to the simple principles of reversed and rotated design to allow the utilities to be stacked economically to serve two side-by-side housing units and to create a variety of dwellings whose principal elevations (service side and garden side) were either symmetrically ordered or informally balanced. The efficient small houses, whether detached or connected in groups, were equipped with the amenities that had become equated with contemporary standards of American life—a modern kitchen (with an electric range and refrigerator), plumbing and electricity, a whole house heating system, provisions for piped-in and softened water, and mechanisms for waste disposal. What appeared as a simplification of form and a minimization of size, in fact resulted from a careful process of planning and analysis of how the modern house was to be used—the groundwork of which had been established by Stein and Wright as well as a group of private research organizations, such as the Albert Farwell Bemis Foundation and John Pierce Foundation.

Two things account for this simplicity—search for low-cost alternatives to traditional house construction, and an emphasis on sound construction, low maintenance, and essential functions of interior space. In his comments at the 1931 President's conference, Secretary of Interior Ray Lyman Wilbur stated: "Beauty is not a veneer to be applied at added cost, but lies rather in the lines of a house, its proportions, the relations of its parts to one another, and of the whole to its setting. It is demonstrable that quality pays, both by endearing the home to the family and by the enhancement of property and community values."[159] Style had driven the small house movement of the 1920s, resulting in period revival embellishments to basic floor plans and a variety of house sizes. It had also fostered the growth of allied building industries, such as Curtiss Woodworking which could produce for a substantial cost an architect-designed Colonial or Federal period entrance and doorway frontispiece rendered in finely cut pine.[160] Such practices led to housing costs that were well beyond what the average working-class family could afford. At the other extreme were shoddily-constructed houses on the small lots of crowded streets in undesirable sections of the urban core, where design was driven by land speculation and profit-seeking interests. Such developments were the object of Mumford's attacks on the building industry and gave impetus to the urgent plea for housing reform by Henry Wright, Catherine Bauer, and Edith Elmer Wood. Participants of the 1931 conference clearly recognized that deteriorating, inadequate older urban housing, as well as poorly built, unplanned new housing, contributed to urban blight which, if left unchecked, would exacerbate the already serious presence of slums in American cities. With the New Deal in place in 1933, the search was on for innovations to reduce housing costs and to bring the comfort of living in a sound house in a healthy, garden-like setting within the realm of the largest sector of Americans—the working class.

In the arena of multiple-unit housing, Chatham Village established a design precedent based on the Georgian Revival style that would be repeated time and time again in brick-faced dwellings through the large-scale FHA-approved and insured rental housing projects, including the first, Colonial Village, built in Arlington County, Virginia in 1936. In designing Greendale's row dwellings, Bentley conformed to the basic principles of

[159] Ray Lyman Wilbur, as quoted in *House Design, Construction and Equipment,* caption opposite title page.

[160] David Gebhard, "The American Colonial Revival in the 1930s," *Winterthur Portfolio* 22, no2/3 (Summer/Autumn 1987), pp. 109-148; Linda Flint McClelland, "Gardens for Suburbia: The Colonial Revival, Community Planning, and the National Housing Act of 1934," paper delivered at the Colonial Revival in America Conference, Charlottesville, Vir., 2000.

arranging the rooms in relation to sunlight, garden views, and practical economies, but offered his own solution evoking the popular sentiment for the nation's colonial origins. He transformed his buildings made of cinder block by providing a thin coating of paint, placing unpainted brick quoining at the corners, topping them with hipped roofs, and relieving the long façades with vestibules and gabled fronts at regular intervals. This solution was unique among the greenbelt towns and unique among other Federally-supported housing developments of the New Deal.

Greenbelt, the first town to take form, was almost entirely made up of multiple-unit dwellings laid out in rows, and with longer dwellings often staggered to adjust to hillside sites according to innovations introduced at Chatham Village. The smallest consisted of two semi-detached units arranged side by side as mirror images, called "duplexes." In contrast, at Greendale dwellings of similar function and scale were laid out on the formal courts and rectilinear lanes that made up the flatter areas of the Greendale town plan (primarily on the east side of the village and in the southern half of the village). The two-story, two-unit rows at Greendale were called "twins," and could be expanded to form a three-unit grouping that included a small second-floor apartment. While numerous floor plans existed, the housing was broken down into basic two and three-bedroom units that could be arranged in pairs as mirror images and then in multiple sets to form four, six, and eight-unit rows. While the floor plans and amenities of each multiple-house unit were similar from one greenbelt town to another, the exterior design and ornamentation varied from town to town, with Greendale's housing reflecting more traditional forms and classically-derived decorative elements (many of them conveyed in functional features—hipped or gabled roofs, central pedimented gables, etc.).

There is no question that the multiple-unit dwellings represented a short-lived phenomenon, in response to a specific set of economic conditions, first the uncertainty of the Great Depression and then the urgency for speed of production to meet wartime needs. Stemming from Wright's analyses, the development of the multiple-row houses in the greenbelt towns represents a formative period in what by the end of the decade would be known as unit-planning. Unit-planning was the basis of much of the modern housing in Europe. Its adoption in the United States substantially reduced the cost of American apartment design and construction. The greenbelt demonstration projects along with privately funded FHA-insured projects (Buckingham Communities, Colonial Village, and Arlington Forest) provided prototypes for the expansive program of defense housing after 1940 and set the stage for massive suburban development nationwide in the post-war period. The design of the multiple-unit row in many parts of the country ultimately became negatively associated with the low-cost public housing sponsored by local housing authorities. By the end of the 1940s, the multiple-unit dwelling that Adams and Wright espoused would fall from favor as a moderate-priced alternative for housing and was supplanted in the postwar period by complexes of garden apartments and neighborhoods of privately-owned small houses. Unit-planning persisted and radically transformed the home-building industry in the following decades of the twentieth century.[161]

Single-family Housing at Greendale

Greendale's domestic architecture sets the village apart from the other greenbelt towns. Almost half (274) of the dwelling units at Greendale were single-family detached houses. In contrast, Greenhills had twenty-four single-family homes out of 676 dwelling units, and Greenbelt had six single-family residences out of 885 dwelling

[161] Methods of unit-planning were first introduced in 1934/1935 in standards published by the PWA's short-lived Housing Division (under the direction of leading RPAA member Robert Kohn). They were expanded upon by architect and RPAA member Eugene "Henry" Klaber, who had worked for Kohn at the PWA and became the lead designer for the FHA's influential large-scale rental housing program. The FHA-insured Buckingham Communities (1935–1938) in Arlington County, Virginia, was the first rental development to implement unit-planning on a large-scale. Included in Stein's *Toward New Towns*, Baldwin Village (NHL) in Los Angeles was one of the finest rental projects to combine garden-city principles with the practical FHA requirements.

units.[162] Greendale's single family houses, designed by Harry H. Bentley to form pleasing and attractive groups, are aesthetically pleasing, showing the influence of the Colonial Revival style in form, roof shape, chimney placement, and window configuration, as well as in the limited use of brick pilasters and quoins.

Local surveys indicated a regional preference for the single-family home with home grounds that were clearly bounded and enclosed for privacy. Certain areas within the village were more suitable for single-family homes although a number of courts combine single and multiple unit dwellings. Peets insisted that it would be easier to erect single-family houses on the irregular topography, given that very little grading was going to be done. Further, he did not accept the conventional wisdom that row housing was the only economically feasible type of housing for families with modest incomes. Final cost estimates supported Peets's view, finding Greendale's single-family houses cost about $10,814 per unit as compared with $10,872 per row house unit at Greenhills, and $9,909 per row house unit at Greenbelt.[163]

For the design of Greendale's single-family detached and twin (semi-detached) residences, Harry Bentley adopted the reverse-front plan that had been introduced in the United States at Radburn. He integrated three basic window types, available as stock millwork, into his single house designs, the standard six-over-six double hung sash for most of the windows with the exception of the living room window which, designed for its potential in providing views of the yard and garden, was a large three-part window, and the utility room, which had a small horizontal window placed at a height for providing light and air, but shielding the room's content from view. Bentley's skill at adapting the general principles for low-cost house to actual practice is illustrated by the wide variety of simple and efficient house designs intended to satisfy a wide range of family needs and preferences, as well as offer options for varying lifestyles and financial budgets. As Bentley observed: "The plan of the Greendale house represents a compromise between observance of customs and habits that have become rooted in modern family life and of innovations contributed by the newer technique of planning and construction. The first consideration has had greater influence upon basic plan characteristics and the second is expressed rather more in the mechanics of household operation."[164]

Despite the historical references, the houses reflect modern ideas about the cost-efficient design, economic use of space, the aesthetic disposition of functional features such as chimneys and windows, and the effects of rotating or reversing a plan to achieve variety and unity, while achieving a sense of order and permanence. The use of efficient floor plans and the treatment of exterior design reflect emerging ideas about the modern house and changing attitudes about what was essential in a safe, efficient, comfortable, and convenient home. At the forefront of this movement, New Deal-era designers had the opportunity to apply their professional skills in a collaborative and interdisciplinary climate. Free of the conventional practices and market pressures of the profit-driven homebuilding industry, architects were able to experiment with new ideas and work out new solutions.

To a large extent, government architects were inventing the modern house. Within the context of New Deal programs, "modern" was not a reference to the work of European designers such as Le Corbusier, Walter Gropius or Ernst May. Instead the term referred to a process of design based on function, practicality, and efficiency. As explained in the FHA's bulletin *Modern Design* (1936):

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[162] U.S. Department of Agriculture, Farm Security Administration, "Greenbelt Communities," p. 12.

[163] Alanen and Eden, p. 41; Arnold, p. 99. In considering the cost of house construction in the greenbelt towns, it should be remembered that the cost of house-construction in the greenbelt towns included a portion of the overall costs for roads, utilities, land for parks and the greenbelt, as well as the cost of public service and community facilities. As Tugwell reminded his critics, private developers of subdivisions rarely provided these and did not factor such costs into their cost accounting.

[164] Bentley, "Residential and Non-residential Construction, p. 37.

> The basic characteristics of Modern design lie in the attempt made to (1) create a plan which will provide a functional relation between rooms arranged to suit present day modes of living, to facilitate efficient housekeeping, and to permit an economical use of materials; (2) to permit the exterior treatment to be dictated primarily by the plan and to be an expression, thereof, with little or no regard to traditional concepts; (3) to use materials efficiently, economically, and directly, boldly eliminating decorative features and relying upon texture and color of materials together with skillful arrangement of masses and openings to produce an aesthetic effect.[165]

Inevitably the quest for lower-cost construction precipitated a definite trend toward the simplification of house forms and the elimination of the Colonial or Tudor Revival embellishments that added cost and placed the adherence to formal stylistic principles over those of a more practical and functional nature. There's no question that the Great Depression of the 1930s and the rising social concerns for housing lower-income Americans brought about new strategies to simplify and find inexpensive alternatives to the well-crafted but expensive house forms and embellishments that characterized the small houses of the 1920s. The process of streamlining the American Colonial Revival house began in the World War I defense housing projects and continued at Mariemont and Radburn. In his design of numerous models for Greendale's single-family houses, Bentley succeeded in creating radically simplified designs through the use of alternative materials for construction, a program of minimal decoration, and the development of floor plans that followed present day functions and expectations for comfort and functionality. In doing so he helped redefine the meaning of "small house" and ushered in a new era in home-building.[166]

Bentley defended his choice of traditional elements of design over more stylistically modern elements, writing:

> Greendale houses look more traditional than contemporary or *moderne* in their architectural character. Two details of the house design give additional reasons for this—the houses have pitched roofs instead of flat roofs and double-hung wood windows with divided lights instead of casements. If our roofs were made flat, if our windows were metal casements with larger panes divided by horizontal muntins and no verticals, if an occasional window were wrapped around the corner and if porches had iron pipe columns instead of wood posts, our houses would begin to assume the *cliché* of modernism. The decisions involved were made with a degree of indifference to resultant style label and were based on certain practical needs and conditions…. We have tried to let the design of the Greendale houses grow naturally out of the practical solution of the problem and to be influenced as little as possible by thoughts of style.[167]

The most innovative change to the design of the single-family homes at Greendale was the adoption of the reverse-front plan that had been introduced at Radburn. All but the three- and six-unit row houses (accounting for twenty-five of the 366 residential buildings) exhibit a reverse-front house plan having a kitchen and utility room on the street side, and the living room on the garden side. This design feature combined with the elimination of a wide setback from the street resulted in reduced construction costs and gave each Greendale house a larger yard with gardens which could be viewed from the living room.

According to Henry Wright the reversal of the house front was an important step towards the creation of moderate-priced dwellings. He looked at this from a social, as well as a practical standpoint, explaining:

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[165] FHA, *Modern Desig*n, Technical Bulletin no. 2 (Washington, D.C.: Government Printing Office, 1936), p. 2.

[166] For a discussion of the small house movement of the 1920s, see Ames and McClelland, pp. 59-60. In addition to Stein and Wright, the highly renowned architect of small houses Frederick Ackerman, also worked on house design at Radburn. Both Wright and Ackerman were influential members of the Committee on Design at the 1931 President's Conference (Wright served as secretary).

[167] Bentley, "Residential and Non-residential Construction," p. 99.

> The street is used for service. In the days of leisurely carriages it was pleasant to look up and down the street to follow the town's social life. This is a dubious advantage in these days of the automobile. The street-fronting entrance that began as a convenience survives mainly as useless display.... The usual house with its front to the street wastes its opportunity to be well connected with the garden.[168]

The reverse-front design lowered the cost of installing utilities by placing the kitchen, utility room, and bathroom on the service side of the house near the street where the water mains, electric wires, and sewer mains were located. Moreover it had freed designers from the conventions of traditional home-building and allowed for radical redesign of the American home. In Wright's experience what started out as a simple process of "turning the free-standing house around to face the garden instead of the street," actually proved to be rather complicated, requiring lengthy study and evoking considerable resistance from both prospective homeowners as well as bankers. The acceptance of this innovation by the greenbelt town program was a major *tour-de-force* that would radically magnify the design possibilities for moderate-cost housing and by the end of the decade would dramatically influence the FHA standards for small house design.[169]

Concrete Construction

Innovative was Harry H. Bentley's use of "cincrete" blocks with a thin coating of cement paint for the construction of the Greendale houses. The architect came to the Greendale project with experience in domestic design, and a particular experience in the use of concrete block masonry. In 1929, Bentley won a design award from the builders' exposition in Chicago for a home "costing over $12,000 and under $25,000." Located in Ravinia (Highland Park), Illinois, the home's brick walls were exposed on the inside and painted white with cement paint. Bentley noted: "The white masonry walls of the interior together with the dark stained ceiling of wood boards and exposed beams produces a result which is reminiscent of peasant cottages in the old country."[170] In 1930, Bentley began designing several cottages in Ogden Dunes, a resort community on the southern shore of Lake Michigan in Indiana, the first being constructed of rough mortared concrete blocks in 1930. A year later an article in the *Chicago Daily Tribune* highlighted Bentley's design for another dune cottage constructed of concrete block, this one having an interior painted with waterproofing cement paint and costing an estimated $6,000 to $8,000.[171]

At Greendale, Bentley turned his attention to using the concrete blocks with a thin exterior coating of Venetian cement paint, supplanting the expensive brick or stone facing of conventional brick-on-block construction of the late 1920s with a thin stucco-like surface that could cover the mortared joints and add a consistent wall color. The living room interior of many of his houses reflected dark stained beams of Ponderosa pine and white plastered surfaces, reminiscent of the interior of his Ravinia house.

This innovation reflects the increasing interest in prefabrication and the use of alternate building materials as a means for reducing construction costs. In 1942, the editors of *Architectural Forum* announced that prefabrication was an important emerging movement in the United States, claiming it was the "child of depression" and saying: "It sprang to life after the collapse of the stock market in 1929 and after the deflation a year earlier of the boom in traditional building which had just swept the country. A market-hungry nation

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[168] Wright, Rehousing Urban America, p. 45.

[169] Ibid.

[170] Louise Bargelt, "Home Building and Remodeling*," Chicago Daily Tribune,* 7 July 1929, p. B2; *Popular Science Monthly* also featured the house in its May 1929 publication. William Dewey Foster, "Comfort Behind Brick Walls," *Popular Science Monthly,* May 1929, pp. 75-76 & 147.

[171] Louise Bargelt, "Home Building and Remodeling," *Chicago Daily Tribune,* 1 March 1931, p. A11.

suddenly became aware that in the field of low cost housing, it had neglected one of its greatest potential markets."[172]

In the 1930s research into prefabricated methods and materials was being conducted by the Albert Farwell Bemis Foundation at M.I.T. in Cambridge; John B. Pierce Foundation in New York City, Purdue Research Foundation at Purdue University, and several agencies of the U.S. government. From this research a multitude of private companies began manufacturing and patenting new systems designed to create a better house and in many cases to take advantage of the economies of mass-production. The impetus for prefabrication was four-fold, as explained by the FHA's publication *Recent Developments in Dwelling Construction*:

> The attack on the problem of building [homes] better and more cheaply is being made on four fronts: purchasing materials and equipment in larger quantities from fewer sources; factory fabrication of larger units and units combining more than one purpose to lessen the work of assembly and erection at the site; the use of materials supposedly better suited to their function and to factory fabrication; and the employment of labor by the week instead of by the hour with a lower hourly wage in return for steadier employment.[173]

The Federal government's interest in the field of prefabrication began in the 1920s and contributed substantially to its progress in the 1930s, the period when "prefabrication was growing to maturity." Founded in 1921 the Federal government's Forest Products Laboratory in Wisconsin invented the first "stress skin" plywood house in 1935; this method of construction had immense effect on further systems of prefabrication using wood and asbestos panels. The Bureau of Standards in the U.S. Department of Commerce assumed the role of testing a number of new materials and setting universal standards for structural materials and methods, and reported its findings in *Buildings Materials and Structures.* The FHA published its own lists as a basis for rating small house construction for loan approval, and the Central Housing Committee of the National Resources Board, which had become an interagency "think" tank on housing, published its own list entitled *Manufacturers of Prefabricated Houses and Systems of Prefabrication.* In their efforts to create communities of low-cost houses, both the Farm Security Administration (FSA) and the Tennessee Valley Authority (TVA) experimented with prefabricated methods and materials. The variety of approaches used by the FSA, which had inherited the greenbelt towns from the RA, led the editors of *Architectural Forum* to call the FSA communities "an actual field laboratory of prefabricated housing."[174]

Concrete had been a forerunner to the experiments of the 1930s. In 1908, Alvah Edison developed a system of inexpensive concrete construction and constructed several experimental houses. Although Edison is generally credited with inventing the first process, architect Grosvenor Atterbury was already working on a system using hollow-cored, precast concrete units, that would be used several years later in the construction of several hundred houses (many of them multiple-unit row houses) at Forest Hills Gardens, the Garden City community sponsored by the Russell Sage Foundation on Long Island. The Portland Cement Association promoted use of the material, and in 1934 published its own survey on precast concrete construction systems. In its first design standards, the FHA recommended concrete blocks as one of several options for the exterior walls of small

[172] "A Movement Emerges," *Architectural Forum* (December 1942), reprinted in Albert Bruce and Harold Sandbank, *A History of Prefabrication,* 1943, reprint (New York: Arno Press, 1972), p. xx.

[173] FHA, *Recent Developments in Dwelling Construction,* Technical Bulletin no.1 (Washington, D.C.: Government Printing Office, 1940), p. 2.

[174] "A Movement Emerges," p. xx.

houses. By 1940, the FHA recognized ten different manufacturers of precast concrete systems whose products could receive FHA approval.[175]

Concrete was admired and desirable because it provided a fire-resistant home and required relatively little maintenance. Of the three available types of precast concrete systems for home building available in the 1930s, the most basic approach was the simple use of concrete or cement blocks as load-bearing masonry units with no reinforcing material. The other two types included a system using small thin slabs, units secured to precast concrete studs or steel reinforcing bars, and a system using large thin reinforced panels.[176] In the August 1936 issue of *Pencil Points,* which also covered the RA's greenbelt town project, the Portland Cement Association offered practitioners a collection of drawings for the architect-designed, "firesafe" concrete home, saying: "These are significant days for concrete. Designers are giving its possibilities much creative attention. More and more builders are becoming concrete craftsman. And home buyers....are awakening to concrete as a source of beauty, comfort, and sound values at low cost per year."[177]

The concrete block offered many advantages for the RA, and in 1942 the editors of *Architectural Forum* recognized it as one of several Federal agencies that pioneered in the use of a variety of prefabricated materials. The Subsistence Homesteads program, which the RA inherited from the PWA in 1935, had already made efficient use of such construction at Jersey Homesteads in Hightstown, New Jersey. The material would be used as a common building material in all three of the greenbelt towns. Concrete blocks were less expensive than highly desirable bricks made from clay, and could be readily and speedily laid up with mortar by relatively unskilled labor—the kind of labor that the suburban resettlement program could expect from the WPA rolls, which was to provide the construction labor. Concrete blocks had been commonly used as load-bearing structural walls since improved techniques for brick and stone veneering became perfected in the 1920s. The use of precast concrete lintels and sills was also introduced in the 1920s.

In the use of concrete, the three greenbelt towns were forerunners to the prefabrication movement. At Greenbelt concrete blocks were manufactured on site, whereas at Greendale it appears that the "cincrete" blocks were manufactured offsite by the Economy Block Company, a local manufacturer in Wauwatosa, Wisconsin. Venetian Cement Paint, manufactured by the E. D. Coddington Manufacturing Company in Milwaukee, was used to cover the mortar joints and provide an attractive, smooth and light-colored wall surface. While concrete was poured in place for a shallow foundation, a reinforced concrete slab with reinforced precast concrete joists supported the first floor of the typical Greendale house (Figure 12). Bentley's effort to provide an attractive surface by applying cement paint was a natural progression for the use of this relatively inexpensive and widely available building material. While cement and concrete blocks were used elsewhere in the greenbelt towns, it was Bentley's application at Greendale that resulted in the most attractive results.[178]

The experimentation and research of the various housing agencies of the government during the 1930s, including the interagency efforts of the Central Housing Committee, laid the foundation for the massive expansion of FHA-insured housing in critical defense areas and the extensive use of privately manufactured, pre-fabricated systems on or near military installations during the war years. Reflecting economizing measures

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[175] "Concrete—Forerunner to the Movement," *Architectural Forum* (February 1943), reprinted in Bruce and Sandbank, pp. 30-36; FHA, *Principles of Planning Small Houses,* Technical Bulletin no.4 (Washington, D.C., 1935), pp. 24, 26, & 33; FHA, *Recent Developments*, p. 12.

[176] FHA, Recent Developments, p. 7.

[177] *Pencil Points* 17, no. 8 (August 1936): 31. The collection was the result of a competition sponsored by the association.

[178] The information about the source of the building materials is taken from advertisements that appeared in *This is Greendale,* pp. 37 & 36 respectively. Apparently some of the exterior precast surfaces (e.g. lintels above entry and garage doors) deteriorated during the first decade, requiring the Federal government to assume the cost for a community-wide, concrete restoration project.

directed at lowering the costs of house construction, the use of concrete block quickly became an icon of functionality and a hallmark of affordable housing.[179]

National Significance and a Comparative View of the Greenbelt Towns

Despite the controversy engendered by the Roosevelt Administration's efforts to promote better housing in the nation through the rural and suburban resettlement programs, the greenbelt communities succeeded in providing a model of suburban living for working-class Americans. Despite the long-term failure of these communities to achieve Howard's ideal of a garden city complete with an agricultural belt and industrial components, Greendale along with Greenhills, Ohio, and Greenbelt, Maryland, did succeed in demonstrating the advanced ideas of neighborhood planning and home construction. They provided successful models of large-scale, residential development at a pivotal time in the evolution of the American home and suburb when the design professions—architecture, landscape architecture, and city planning—had reached maturity. The imperative that professional methodologies coalesce and collaborative strategies be developed for civic improvement and social betterment had never before been realized on such a large-scale.

Since the creation of the greenbelt towns, planners, architects, historians, and architectural critics have recognized the unique achievement of the three greenbelt towns, and some have drawn attention to the special qualities that distinguish the Greendale plan and the individual talents brought to the greenbelt program by town planners Elbert Peets and Jacob Crane and their team of designers. In 1955, renowned professor of planning Carl Feiss of the University of Pennsylvania was one of the first scholars to recognize the importance of Greenbelt and call for its recognition and preservation as one of the century's most important undertakings. Planning theorist Mel Scott described the great popularity and interest afforded the government-sponsored Garden City projects:

> No projects of the Federal government...had aroused so much curiosity or attracted such hordes of visitors as these three towns and the TVA town of Norris. Above all else, foreigners wanted to see Norris, and above all else, Americans wanted to damn or praise the greenbelt towns. In New Deal days almost no one was neutral. As for city planners, all those who had any part in designing or developing these communities are still starry-eyed at the very mention of them."[180]

In *Tomorrow a New World* (1959), Paul Conkin called the greenbelt towns "the most daring, original, and ambitious experiments in public housing in the history of the United States." Recognizing their international influence, he said: "They rank high among New Deal accomplishments. In the field of public works, they were hardly excelled…in imagination, in breaking with precedent, and in social objective."[181]

Likely more than 100 planned housing developments of varying sizes were sponsored by the U.S. Government during the New Deal. These ranged from the numerous rural resettlement communities which although scattered across the nation, were concentrated in those states most adversely affected by environmental degradation due to overuse of the land, drought, and the dust storms, to the first urban housing projects built

[179] For example, the "stress skin" plywood house invented by the U.S. government's Forest Products Laboratory in Wisconsin in 1935 led to a number of privately manufactured systems based on the use of wood and asbestos-treated panels. Among the various prefabricated models built at Oak Ridge, Tennessee, in the war years was one developed by Celotex of Chicago using the patented "Cemesto" panels.

[180] Carl Feiss, "Historic Town Keeping," *Journal of the American Society of Architectural Historians* 14, no. x (December 1956), pp. xx; Scott, p. 335. Although Stein did not include it among his new towns, Norris (NR), which was designed by planner Tracy Augur for the Tennessee Valley Authority, is considered by many to be as significant a Garden City design as the three greenbelt towns.

[181] Paul K. Conkin, *Tomorrow a New World: The New Deal Community Program*. 1959. Reprint (New York: DaCapo Press, 1976), pp. 303 & 305.

under the Public Works Administration (PWA). In *The American City: What Works, What Doesn't* (1997), Alexander Garvin has stated that of these only the three greenbelt towns were "genuine, planned new towns," and, unlike the others "most of which have long since faded into obscurity..., they continue to serve as object lessons in the use of public open space and community facilities to create superior living environments."[182]

There is no question that most attention has been given to the Greenbelt community as the first, the largest, and the most widely publicized of the three greenbelt towns. The full scope of the greenbelt program can only be fully understood and appreciated by looking at all three communities from two perspectives—collectively as a group sharing common goals and influences, and individually as each reflects a unique collaboration of designers and a distinct response to local and regional needs and conditions. Each greenbelt town had its own multi-disciplinary design team led by design professionals and supplemented by experts in diverse fields such as housing, education, social welfare, agricultural economics and wildlife management. Each greenbelt town was scientifically planned (according to methods recommended by Stein and Wright), based on numerous surveys (as Scottish planner Patrick Geddes had advocated) including topography, soil types, wind direction, and weather conditions, as well as the preferences and demographic characteristics of potential tenants. Each design team employed their collective expertise to address the site conditions and the characteristics of the target population. The result was the creation of three towns, each of which displayed an innovative site plan, abundant parks, and high-quality housing that was modern yet economical in layout and materials. The differences between the greenbelt towns reflect not only differences in site and target population, but also differences in the views and sensibilities of the design team (especially the chief planner), which made each greenbelt town unique.

When Clarence Stein visited the three completed towns in the late 1940s, he singled out Greendale as "superbly related to its natural site," and noted the way the preservation of natural features, such as Dale Creek, added to its attractiveness. He said: "the restful and gracious unity of Greendale impressed me strongly—perhaps more strongly than any other visual characteristic—when I revisited it after a number of years absence. It is a rare quality in a modern town." He described the town as "a living, growing reality," and optimistically he told the town's residents: "Greendale is destined to play an important part in American history. It is true it is small—but that is one of the reasons that I think it will have lasting influence on the form and character of future communities. That these are going to be quite different than our existing cities is becoming increasing apparent."[183]

In Stein's *Toward New Towns,* a retrospective view of the American Garden City communities for which he had been either a designer or planning consultant, published in England several years later he repeated his praise for Greendale's special qualities:

> Greendale was planned and built as a harmonious whole. It shows that regimentation and monotony are not necessarily the product of overall design of the street pattern and buildings of a village. The buildings are harmonious in spite of the diversity of their form and placing. The care with which planners related structures to site and to one another is the result of skillful practice and a real affection for the place they helped to create. The varied architectural beauty

[182] Alexander Garvin, *The American City—What Works, What Doesn't*. (New York: McGraw-Hill, 1996), p. 344.

[183] Stein's comments first appeared in the pamphlet, *This is Greendale*, commemorating the town's tenth anniversary publication, pp.19-22. Several years later the same words reappeared the chapter on Greendale in Stein's, *Toward New Towns*, which was first published in England at the beginning of the British New Towns movement of the 1950s and five years later in the United States. Quotations are taken from pp. 185 & 187.

> accentuates rather than overshadows its natural setting. A restful and gracious unity is the result.[184]

Stein's book drew international attention to the achievement of the three greenbelt towns. He remained an important force in the preservation of the three original greenbelt communities and the transfer of the government-owned homes to private ownership in the early 1950s. Moreover, he and other members of the RPAA had an influential role in the New Towns movement in Great Britain and later in the United States and Canada. They, too, praised Greendale. Architect Henry Churchill, who had been an architect on the Greenbrook team, admired the Greendale buildings but considered the architecture at Greenbelt and Greenhills as "competent and undistinguished."[185] In 1967, Albert Mayer, a close associate of Henry Wright, the other architect for Greenbrook, concluded that he "found [Greendale] to have more faithfully followed the original open land use concepts than either of the other two greenbelt towns."[186]

In *New Deal in the Suburbs* (1971)*,* Joseph L. Arnold was one of the first to seriously examine the greenbelt towns from a more neutral position, not being an RPAA member or closely connected with the greenbelt towns or its forerunners (like Churchill, Mayer, and Stein). In comparing the three towns, Arnold said: "Only Greendale has charm and atmosphere…Greenbelt and Greenhills are recognizable as institutional type structures while Greendale, even with row houses, looks like a collection of individual homes which happened to grow together into a lovely village."[187] He pointed out that what was likely the best tribute to the greenbelt town planners came from the National Association of Real Estate Boards (NAREB) which in 1937 "between its denunciation of all government housing programs, praised the three towns for their excellent design."[188]

Arnold was particularly impressed by the village's Colonial Revival design and historical references, which he felt gave Greendale distinction from an aesthetic point of view, but also made it the "most interesting greenbelt town." Praising the community, he wrote:

> American colonial traditions provided the inspiration for Greendale's architecture.... Greendale's houses are set in the American colonial and European village pattern—close to the street with small fenced yards on the side and rear. While all the towns are green and spacious, only Greendale has charm and atmosphere.... Greendale, even with row houses, looks like a collection of individual homes that happened to grow together into a lovely village.[189]

Distinctive at Greendale is the Colonial Revival influence seen in its architecture, as well as in the overall plan and the siting of houses close to the street. The commercial and administrative buildings, designed by Walter G. Thomas, display symmetrical façades, brick-veneered surfaces, and brick quoining. Peets identified Colonial Williamsburg, then undergoing reconstruction, as an inspiration for the plan of Greendale.[190] The Village Hall borrows more directly from Williamsburg, deriving its five-part plan and details such as the wooden clock tower from the capitol building. In comparison, the buildings at Greenbelt and Greenhills show the influence of

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[184] Stein, *Toward New Towns for America,* p. 185; Stein, "Greendale and the Future," in *This is Greenda*le," p. 20; "Greendale and the Future," *American City* 63, no. 6 (June 1948): 106-109; "Greendale Revisited," in *Layout for Living,* no. 21 (January 1949): 4-7.

[185] Henry S. Churchill, "Henry Wright 1878-1936," in Donald A. Krueckeberg, ed., *The American Planner, Biographies and Recollections*, 2nd ed. (New Brunswick, N.J.: Center for Urban Policy Research, 1994), p. 252.

[186] Mayer, p. 81, as quoted in Arnold. Mayer particularly lamented the form new development had taken at Greenhills, "the refreshing green of the original Greenhills contrasting with the serried ranks of parallel roads and housing in the later portions and in the new private development of Forest Park."

[187] As quoted in Arnold, p. 102-03.

[188] NAREB Confidential Weekly Letter, August 30, 1937, as quoted in Arnold, p. 103 & en. 99.

[189] Arnold, p. 103.

[190] Peets, "Greendale," p. 222.

the International Style and are, in Arnold's words, "poor reflections" of the European Bauhaus designs that inspired their exterior appearance.[191]

Others have appreciated the community's aesthetic character and practical merits. Admiring Peets's ability to "reconcile monumental and domestic scale," art historian Walter Creese in *The Search for Environment* named Greendale "the best of the New Deal greenbelt towns." This outstanding quality, Creese remarked, links Peets with the work of preeminent planner John Nolen at Mariemont, Ohio, and Venice, Florida, and distinguishes Peets's three suburban masterworks: Greendale; his early work at Washington Highlands (1916); and the design of Park Forest, Illinois, a postwar Chicago suburb.[192] To Gregory Randall, the author of *America's Original G.I. Town* (2000) and an expert on the history and design of Park Forest, where Peets worked for American Community Builders, has remarked: "It was his [Peets] merging of the concept of the detached house with the defined cul-de-sac which set Greendale apart from the other Greenbelt towns."[193]

In the *Public Landscape of the New Deal* (1985), a study of the impact of the Roosevelt-era programs on the American landscape and the role of landscape architecture profession, Phoebe Cutler drew special attention to Greendale. She described it as the "most discussed" of the three completed greenbelt towns because of "its Colonial-style wood-frame and concrete block construction, its greater reliance upon single-family housing, and its use of picturesque 'greenways' combined to create a more appealing image than the severe *moderne* and plain row-house construction of the other two developments." She too found that the community retained more of its original character and that the later development of the greenbelt had been "more accommodating." She recognized its unique character, its homage to the English garden-city tradition, and its place in a "long line of native developments reaching back to Colonial Williamsburg and extending, in the twentieth century, to Radburn." On the legacy of the greenbelt communities, she wrote: "Though there may be no duplicate of Greendale, with its pleasing homes, shaded walks, harmonious commercial center, and rim-running woodland, its image and those of the other two greenbelt cities have been approximated all over the country from Jonathan, Minnesota, to Foster City, California."[194]

In a recent essay, "The Garden City and the New Urbanism," planning critic and editor William Fulton identified the blending of formal and informal traditions, which is unequivocally expressed at Greendale, as a hallmark of American garden suburb design. He linked the Federal greenbelt towns and Radburn with the quintessential suburban community of Riverside, Illinois, calling them "true garden suburbs in the sense that they use naturalistic elements [natural topography of rolling hills, forested hillsides, and flowing creek] rather than buildings and streets as their focal point." He stated: "Looking back across the modernist divide it is tempting to conclude that the melding of traditions was the real strength of community planning in the pre-World War II era." This quality, he finds, also links Greendale more than the other greenbelt towns with Nolen's formalism at Venice, Florida, and Mariemont, Ohio, and the work of the New Urbanists in the 1990s.[195]

Upholding the importance of the American experience in community planning, Eugenie L. Birch has identified five distinct stages of the Garden City movement in the United States. She classifies Sunnyside, Radburn, and Chatham Village, as the first generation, and the three greenbelt towns and Norris, Tennessee (built by the TVA) as the second generation. She sees the new towns of the 1960s, including Columbia, Maryland, and Reston, Virginia, as the third generation, and the popular Planning Unit Developments (PUDS) of the 1960s as

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[191] Arnold, p. 103.

[192] Walter L. Creese, *The Search for Environment: The Search for Environment: The Garden City, Before and After,* 1966, expanded ed. (Baltimore: Johns Hopkins University Press, 1992), p. 370.

[193] Gregory Randall, *America's Original G.I Town* (Baltimore: Johns Hopkins University Press, 2000), p. 48 & en 31.

[194] Phoebe Cutler, *Public Landscape of the New Deal* (New Haven: Yale University Press, 1985), pp. 123-24.

[195] William Fulton, "The Garden City and the New Urbanism," in Parsons and Schuyler, eds., pp. 162 & 167.

Plater-Zyberk, such as Seaside, Florida, as the fifth and most recent expression of what seems to be a persistent need among the design profession to define and redefine Ebenezer Howard's 1898 theories.[196]

The influence of Greendale and the other greenbelt towns, as exemplars of Neighborhood Unit Plan and the Radburn Idea, is most evident in the plans for the cities erected as part of the New Towns movement. Following World War II, the New Towns movement was launched when the British government initiated a program to fund the design and construction of self-supporting, satellite communities around the commonwealth. In part, this effort represented a rebirth of the Garden City movement, but many English new towns displayed the influence of the Radburn Idea, and the design of the greenbelt towns. Cumbernauld is the best-known British example. Designed in 1955, Cumbernauld is situated near Glasgow, Scotland, and was intended to house 70,000 people. It features a hierarchical street system, and the unit of design is the neighborhood, based on the school service area. New towns in other countries that were, like Greendale, planned in neighborhood units, include: Vallingby, outside Stockholm, Sweden; Sondergaardsparken, near Copenhagen, Denmark; Chandigarh, in the East Punjab, India; and Kitimat, British Columbia, Canada. Kitimat can be directly traced to Radburn and the greenbelt towns, as it was designed by Clarence Stein, Albert Mayer (one of the principal architects for the ill-fated Greenbrook), and Julian Whittlesey (a draftsman on the original design of Greenbelt and a consultant on Greenbelt's 1955 master plan). In 1957, Mayer and Whittlesey collaborated on the plan for the first post-World War II new town erected in the U.S.: Reston, Virginia.[197]

Reston, like most other American new towns of the post-World War II era, was financed by a private developer. Robert E. Simon, whose father had been an investor in Radburn, erected Reston outside of Washington, D.C., in 1961-64. Reston displays numerous features clearly inspired by the greenbelt towns and Radburn. It is made up of seven villages arranged around a commercial and administrative center. Each village was intended to house about 10,000 people, divided into five or six neighborhoods. An elementary school is the focus of each neighborhood. Housing is clustered, and naturalistic green space follows stream valleys through the plan, just as it does at Greendale. The other notable new town of the 1960s, Columbia, Maryland, also exhibits villages composed of school-centered neighborhoods, with clustered housing and linear open space laid out along existing stream valleys. Columbia, located half-way between Washington, D.C. and Baltimore, Maryland, was built by developer James W. Rouse in 1963–65.[198]

Neither Reston nor Columbia was an immediate financial success. Perhaps for this reason, a lull in the construction of new towns followed until the erection of Seaside, Florida. Seaside, planned by Miami architects Andres Duany and Elizabeth Plater-Zyberk in 1982, was the first manifestation of what would become known as the New Urbanism. In contrast to the greenbelt towns and Radburn, New Urbanist communities are formal in layout and reverse the turned-around house plan, substituting streets for pedestrian pathways, and alleys for residential service lanes.[199] New Urbanists draw inspiration from the work of two planners who were very much a part of the Garden City movement, Raymond Unwin and John Nolen.[200] The Charter of New Urbanism, ratified in 1996 at the annual meeting of the Congress for the New Urbanism, shows that New Urbanism shares many of the design principles of the Neighborhood Unit Plan and the American Garden City movement, as represented by the greenbelt towns and Radburn. These common principles can be summarized as follows: first, that development should be based on compact, pedestrian-oriented neighborhoods that have clearly defined

[196] Eugenie L. Birch, "Five Generations of the Garden City: Tracing Howard's Legacy in Twentieth-Century Residential Planning," in Parsons and Schuyler, eds., pp. 177-79.

[197] Schubert, p. 132; Kermit C. Parsons, "British and American Community Design: Clarence Stein's Manhattan Transfer, 1924-74," in Parsons and Schuyler, eds., pp. 152-53; Stein, *Toward New Towns*, p. 9. See also "Radburn NHL Nomination" and "Greenbelt NHL Nomination."

[198] Parsons, "British and American Community Design," p. 153; Fulton, p. 169; Birch, pp. 177-79.

[199] Fulton, p. 166.

[200] Ibid., p. 165.

centers and edges; second, that the neighborhood should accommodate a diverse mix of activities including residences, shops, schools, workplaces and parks; third, that the neighborhood should be no more than one-quarter mile from center to edge and laid out so as to encourage pedestrian activity; fourth, that the neighborhood should incorporate a wide range of housing types to attract families of different incomes and compositions; fifth, that parks, playgrounds, squares and greenbelts should be provided in convenient locations throughout the community; sixth, that the neighborhood center should include a public space, such as a library, church or community center, as well as a transit stop and retail businesses; and seventh, that civic buildings, such as government offices, churches and libraries, should be sited in prominent locations.[201]

From the Greenbelt Towns to Postwar Suburbs

Greendale and the other greenbelt towns represent the highest expression of the ideal in urban planning principles of the 1930s. Tugwell's vision of hundreds of well designed, conservationist, government-built and cooperatively owned towns ringing America's urban centers, providing better homes for low-income families and promoting a participatory democratic community, was left unfulfilled. This failure turned on a pivotal question of the twentieth century: What should be the role of the Federal government in housing? Before the Great Depression and the 1931 President's conference, the role of the Federal government was limited to providing emergency wartime housing, establishing technical standards for building materials, and recommending the use of standard planning and zoning statutes. Previously it had not intervened in either the home-building industry or the process of mortgage lending, and had not provided housing assistance to the needy. The American system of *laissez faire* capitalism looked to private industry to provide housing, and to private and religious charities to help the poor. By the early 1930s, it had become evident that private industry could not build adequate housing for everyone; there was no profit in erecting housing for the poor, and there were too many low-income families competing for the older housing that "trickled down" as those with higher incomes moved into better units. It had also become clear that local and state government efforts to improve slum housing through zoning ordinances and other regulations were not working.

In June 1933, President Roosevelt's New Deal administration initiated two distinctly different approaches to address the housing crisis. The first was to intervene in the housing market indirectly by creating the Home Owners' Loan Corporation, which introduced long-term, low-interest, self-amortizing loans for existing homeowners. The second approach followed the European model of low-cost housing built or funded directly by the government; this was Title II of the National Industrial Recovery Act, which created the Federal Emergency Administration of Public Works (PWA), which set up both urban and rural housing programs. The National Housing Act of 1934 (48 Stat. 1246) built on indirect intervention, by establishing the Federal Housing Administration (FHA), which established national housing standards as a basis for providing Federal insurance for privately financed, long-term, self-amortizing mortgages for owner-occupied houses, residential subdivisions, and rental housing. Amendments to the NHA in 1938 (52 Stat. 8) and 1941 (55 Stat.31) together broadened the incentives for home building and home ownership by making low-interest, long-term mortgages affordable for an increasing segment of the population. With planning assistance from the FHA the first private large-scale housing developments took form prior to World War II. In contrast, the creation of the Resettlement Division in 1935 expanded on the direct intervention approach, and the greenbelt town program, intended for working families with moderately low incomes, represented the government's greatest encroachment into the housing market. Public housing drew vocal opposition from the powerful real estate lobby, and the greenbelt town program, the New Deal's most visible housing program, was the lightening rod.[202]

[201] Birch, pp. 185-86.

[202] Ames and McClelland, pp. 30-31; Robinson and Associates, Inc. and Shrimpton, pp. 20 & 58-62. The issue of home financing was treated in the second volume of the proceedings of the 1931 President's Conference on Home Building and Home Ownership. The Hoover Administration created the Federal Home Loan Bank (47 Stat. 725) in 1932, which served as a credit reserve and

The National Association of Real Estate Boards (NAREB), the Chamber of Commerce of the U.S., and the U.S. Building and Loan League, leaders in the real estate lobby, argued that public housing in general, and the greenbelt towns in particular, represented unfair competition to private efforts and were not only unnecessary, but detrimental to the real estate market, because the low rents of public housing would reduce demand for new construction and delay the recovery of the private homebuilding industry. Walter S. Schmidt, president of NAREB, articulated this view: "It is contrary to the genius of the American people and the ideals they have established that government become landlord to its citizens…There is sound logic in the continuance of the practice under which those who have initiative and the will to save acquire better living facilities, and yield their former quarters at modest rents to the group below."[203]

Opponents also denounced the greenbelt towns as socialist, their unsubstantiated charges convincing many Americans that the towns, with their cooperatives and their communitarian spirit, were exercises in state socialism. The Chamber of Commerce of the U.S. declared the greenbelt town program "an experiment in state control of far-reaching proportions," while NAREB called the program "undiluted socialism."[204] Others criticized the overall construction costs. Some members of the press added fuel to the fire, printing articles about the towns under headlines such as, "First Communist Town in U.S. Nears Completion," "Tugwell Abolishes Private Property," and "The Sweetheart of the Regimenters: Dr. Tugwell Makes America Over."[205] The last article inspired a nickname for New Deal planners, "the Make-America-Over Corps."[206]

The negative publicity Tugwell and the greenbelt towns engendered aroused public sentiment against direct government intervention in the housing market. Subsequent public housing legislation was enacted only with great difficulty, and with severe restrictions placed on the role of the Federal government and the cost of the program. The United States Housing Act of 1937 (also known as the Wagner Act) established the U.S. Housing Authority (USHA) as a permanent public housing program for very low-income families, but did not permit the USHA to directly build or manage public housing. The USHA was to act as the financial agent and to provide technical advice, but all other responsibilities were given to local housing authorities. Senator Harry Byrd, demanding assurances that the public housing program would not duplicate the "extravagant" expenses of the greenbelt towns, attached a rider to the Act that prevented the USHA from spending more than $5,000 per dwelling unit.[207] The debate over the role of Federal government in the housing market had ended. Thereafter, government policy was primarily one of indirect intervention, promoting and protecting capitalist investment by guaranteeing mortgages and providing building credit for developers through the FHA and the Veterans Administration loan programs.[208]

The physical design of Greendale and the other greenbelt communities is their most enduring legacy. Even the National Association of Real Estate Boards, which supported both the private building industry and high standards for community building, lauded the three towns for their "excellent design," at the same time it was condemning all public housing projects.[209] On this front, the communities overwhelmingly succeeded in their demonstration of desirable standards for neighborhood planning, efficient large-scale methods of construction, accommodations for increasing automobile ownership and use, and the design of convenient and comfortable low-cost dwellings. These communities provided an immediate response to the housing crisis and need for

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provided advanced funding secured by home mortgages to banks and savings and loan associations. The 1941 law was also known as the Lanham Act.

[203] Quoted in Robinson and Associates, Inc., and Shrimpton, p. 51.

[204] Quoted in Cady, p. 298.

[205] Articles in the *Chicago American*, 28 October 1936; *New York American*, 29 October 1936; *American Mercury* 9 (September 1936), p. 78; all quoted in Arnold, p. 197.

[206] Wright, Building the Dream, p. 222.

[207] Robinson & Associates, Inc., and Shrimpton, pp. 56-57.

[208] Schaffer, p. 226.

[209] Quoted in Arnold, p. 104.

employment. In the process they entered a previously uncharted field—the design and construction of an entire community of neighborhoods, and a successful residential suburb built on innovative principles of large-scale construction. For designers—planners, architects, and landscape architects—they offered an unprecedented opportunity to perfect the American suburb, to employ new methods and materials of construction, and to apply their skills and knowledge on a grand scale. They succeeded in providing a model for regional planning by locating towns outside the urban center, preserving natural systems (woodlands and streams), and linking the communities with metropolitan systems of parks and parkways—which provided access to places of employment as well as expanded areas for recreation and conservation. Near Greendale, Whitnall Park, the Boerner Arboretum, and the Root River Parkway were all being improved or built through the CCC and WPA, both programs of the New Deal.

In their 1987 study of Greendale, *Main Street Ready-Made,* Arnold Alanen and Joseph Eden concluded that the greenbelt town program far exceeded the purpose of being a make-work relief program and demonstration of low-cost housing. It probed deeply into the problems of the times and affected solutions that would leave a lasting, if not idealized, impression on American minds about the meaning of home, neighborhood and community. As Alanen and Eden explained: "It was…a bold crusade against the invisible and ill-understood economic and social forces that were undermining the dignity and self-worth of Americans while destroying the fabric of interdependence which had bound together families and communities. With the greenbelt town, the New Deal cautiously backed into the future."[210]

The greenbelt town demonstration projects became one of the most comprehensive proving grounds for the Federal standards of neighborhood planning, large-scale development, and durable low-cost suburban housing that became the basis for project approval by the Federal Housing Administration's program of Federal mortgage insurance. Most important, they established an ideal in the form of what became FHA's "most desirable" standards for neighborhood planning and small house construction at a time when few private development interests could find the down-payment to qualify for long-term amortized mortgages that could be insured by the U.S. government. From the beginning the FHA standards emphasized the importance of planning residential neighborhoods, suggesting measures for developers to follow based on many of the recommendations of the 1931 President's conference, the best practices of community builders of the 1920s, who were closely allied with the NAREB, and to some extent the Radburn innovations.

Advance planning provided economic advantages for the developer and the homeowner, but it was also seen as essential for the stability of long-term real estate values. The first edition of FHA's *Planning Neighborhoods for Small Houses* (1936) stated:

> In the building and owning of a house, land is the first item of cost; environment is the final source of value. Whether from the point of view of economy, or of satisfaction with a property, or of marketability, no individual dwelling or class of dwellings may be considered apart from the land they occupy and the surrounding features which tend to make the land retain its value for residential purposes.[211]

These standards set forth general principles of design; many parallel the principles followed by Peets and Crane in their planning of Greendale. These include the need to ascertain the need for housing; selecting a site suitable for the proposed type of development; insuring accessibility to transportation, schools, commercial centers, and places of employment; and planning for the installation of utilities and street improvements. Neighborhood character, for the first time, was defined as an important aspect of blight-resistant residential design. Large-scale

[210] Alanen and Eden, p.4.

[211] FHA, *Planning Neighborhoods for Small House*, Technical Bulletin no. *5* (Washington, D.C.: Government Printing Office, 1936), p. 1.

operations were encouraged for their economic advantages but also their potential in supporting nearby commercial services.

At the FHA, Seward H. Mott, formerly of Pitkin and Mott, a Cleveland landscape design firm that specialized in subdivision design, was responsible for devising the neighborhood standards as well as perfecting the design of streets for neighborhoods of detached, small houses that would qualify for FHA loan approval. For cost-efficiency, attractiveness, and safety, neighborhoods were to have a hierarchy of streets and a variety of street types. Major and minor roads were to be differentiated. Minor residential lanes and cul-de-sacs were to be incorporated and designed to closely fit the natural topography (avoiding costly cut-and-fill construction). In hilly areas, such streets offered multiple advantages "with the result that an attractive and unforced curvilinear layout is secured at reduced improvement cost, creating interesting vistas and doing away with the monotony of long, straight rows of houses." Blocks were to follow the flow of traffic, four-way intersections were to be avoided, and minor streets were to meet major streets at right angles. The planting of street trees was encouraged, and the services of a landscape architect were to be secured to obtain attractive landscape effects.

To a trained and experienced landscape architect like Elbert Peets or town planner like Jacob Crane such principles echoed well-established professional practices of subdivision design. To some extent, however, they conflicted with Peets's own personal preference for the well-ordered street grid and formal city planning. When viewed in this context, the intricacy and ingenuity of Greendale's network of streets becomes all the more remarkable as a balanced compromise between the formal and informal, between the rigid conventions of a seasoned designer and the prospect of new and more successful solutions.

When more advanced standards and street patterns were published in FHA's *Successful Subdivisions* and *Planning Profitable Neighborhoods,* both published in 1938, direct references to Greendale's layout of streets were evident .[212] The FHA set forth ideas that had been demonstrated on a large-scale at Greendale. Not surprising was the FHA's explanation: "A more desirable neighborhood can be created when roads are located to fit the existing lay of the ground and placed in such a manner as to preserve, as far as possible, the native tree growth. The curving of streets to fit contours of the land and the saving of valuable trees add to the beauty of a development and reduce construction costs."[213]

Nor was it surprising that FHA's *Successful Subdivisions*—the first of a set of land planning bulletins the agency introduced in 1938—advised developers and builders that streets should fit the contours of irregular land, traffic should flow toward thoroughfares, minor streets should enter major streets at right angles, and residential lots should be protected from major street traffic. Parks were to be viewed as a neighborhood asset and were to be placed in "rough wooded areas that are difficult to develop." On the value of the natural attributes of a building site, the bulletin stated: "Natural features of the site should be preserved… Each lot within a new subdivision should constitute a good house site, planned as to size, shape, and orientation to take full advantage of desirable views, slope of land, sunlight, prevailing winds, shade trees, and adjoining public spaces."[214]

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[212] For comparison see FHA, Successful Subdivision: Principles of Planning for Economy and Protection against Neighborhood Blight, Land Planning Bulletin no. 1 (Washington, DC: Federal Housing Administration, 1938), p. 17; FHA, Planning Profitable Neighborhoods, Technical Bulletin no. 7 (Washington, DC Federal Housing Administration, 1938), p. 9. The influence of Greendale on the FHA standards for neighborhoods of small houses is probably best illustrated by the design of Arlington Forest (NR), a 1938 residential development in the Washington, D.C. metropolitan area which placed six houses with simple floor plans and side entrances on narrow lots arranged on curvilinear street in rows six to the acre.

[213] Planning Profitable Neighborhoods, p. 13.

[214] *Successful Subdivisions*, pp. 14-18. Each principle was explained in the text with a diagram. It is interesting to note that the i diagram of the curvilinear street with a reverse curve, resembling the Peets and Crane design for Basswood St. and Clover Lane at Greendale, is used to illustrate the principle that minor streets must intersect at right angles to the major collector roads.

Although the relationship between the RA and FHA designers who were working on similar design problems has not been determined, it is evident that a closer relationship than previously recognized existed between the designers of the Suburban Resettlement program and those of the FHA. Given Greendale's preponderance of single-family houses, the exchange and cross-fertilization of ideas and influences should not be surprising. For the designers of both agencies, the mid-1930s was a period of experimentation with many of the ideas that had coalesced in the 1931 President's conference and stemmed from the mandate for better lower-cost housing and safe, healthy neighborhoods. The initial purpose of the greenbelt towns, spurred in large part by Tugwell's visionary ideas as well as the deeply held principles of the RPAA, was to present a new paradigm of town planning and community development; the FHA from the beginning set out to pursue more modest goals. Although these are similarities in their adoption of the Neighborhood Unit Plan and innovative principles of small house design, the essential distinction exists that the Suburban Resettlement program was focused on creating an entire community, while the FHA's purview extended only to house design and the planning of residential subdivisions.[215]

The two programs started out with two vastly different approaches to house design and construction. Providing a counterpoint to PWA's housing program that had been disbanded the previous year, the first publication of FHA standards *Principles of Planning Small Houses* (1936) was prefaced by the caveat that the bulletin did not "presume to offer a solution to the housing problem" or "infer that under existing conditions suitable new dwellings may be produced for all classes of families." Instead, it clarified: "It seeks only to demonstrate...what is presently possible, without resort to change in methods or materials, or other wide diversion from customary traditions in the home building field." Five basic house designs were suggested ranging from a minimal one-story house to a larger two-story, three-bedroom house (some reminiscent of Mott's own plans for the homes of automobile workers in Flint, Michigan). These five could be executed in a variety of materials. Likely as a result of its overwhelming endorsement by the 1931 President's conference, the innovations introduced at Radburn appeared in the standards among other more traditional practices for house and neighborhood design.[216]

Once they were built, the FHA officials could hardly ignore the successful innovations of the greenbelt towns. This influence would find its way into the revision of its standards for planning small houses in 1940. The revised edition of *Principles of Planning Small Houses* emphasized the goals of livability and low cost, the importance of beginning with a plan, and the necessity of a well-balanced design where "a maximum amount of usable space, with as much comfort, convenience, and privacy as possible, must be obtained for a minimum amount of money." Simple, expandable floor plans were suggested and an entirely new system of house design was introduced designing each home with an efficient interior layout and siting it on a cul-de-sac, taking into account the orientation of each room to sunlight, prevailing winds, and the view. Design of single, detached houses was not to be repetitive, but varied within a streetscape. Variations were encouraged by varying the roof types, and alternately orienting or revolving houses to the side of each lot or to front on the streets. Small additions could be added as porches, vestibules, utility rooms, dens, or additional small rooms. Versatility, variety and expandability became underlying principles for FHA-approved house design. Any plan could be oriented to take advantage of sunlight, prevailing winds, or garden views, simply by rotating the plan or reversing it and relocating the entrance door and living room windows.[217]

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[215] Special considerations for the presence of local zoning regulations and the requirement that protective covenants and deed restrictions be attached to the sale of homes gave the FHA leverage and control over potential deteriorating influences; because of the initial government-ownership, these factors were not considered in the planning of the greenbelt towns.

[216] FHA, *Principles of Planning Small Houses,* Technical Bulletin no. 4 (Washington, DC: Government Printing Office, 1936), p. 1. The PWA's Housing Division had already been disbanded.

[217] FHA, *Principles of Planning Small* Houses, Technical Bulletin no. 4, revised ed. (Washington, DC: Government Printing Office, 1940), p. 3 & 13.

Many have asked: What went wrong? Stein succeeded in publicizing the greenbelt towns along with other projects he had had a definite hand in the making, including Sunnyside Gardens, Radburn, Hillside Homes, Chatham Village, and Baldwin Hills (An FHA insured large-scale apartment community). Drawing international attention to the achievements of the American Garden City movement, Stein's book *Toward New Towns for America* was published first in England in 1950, and then in America several years later. While advocates Bauer and Mumford continued to call for garden-city planning, Stein continued to seek Federal support for new towns legislation, unsuccessfully in a country where private business interests once again flourished. Many argue with good reason that suburbs flourished in the 1950s due to the increasingly favorable terms of the FHA and G.I.-insured mortgages. In the process of becoming successful, the large-scale housing industry adopted standards that became formulaic and produced neighborhoods that were attractive but commonplace. Such efforts lacked the professional involvement, concerns for coordination on a regional scale, and the idealistic direction of the 1930s, which had been a golden decade as far as housing was concerned—a time when designers and policymakers embraced the Neighborhood Unit Plan and looked to new methods of construction to solve the Nation's most serious social issue, the housing of its citizens. Architect Robert Stern has reminded us of what was possible when the highest professional standards and the nation's finest designers were involved in the design of America's suburbs. In 1978, bemoaning the triviality of what had become the ubiquitous modern American suburb, he stated: "Our best architects have abandoned the suburbs to the ordinary practitioner and to the speculative builder. And the discipline of town planning has been allowed to die. For the past thirty years, there have been very few efforts made towards understanding the suburb and suburban architecture."[218]

Conclusion

Greendale is the physical manifestation of the desire, handed down from Ebenezer Howard to American urban planners of the New Deal era, to provide a humane, pedestrian- and family-oriented environment that would encourage the residents to form a democratic and cooperative community. Greendale, Greenbelt, and Greenhills are as important for the inspiration they continue to provide to urban planners as they are for their place in American urban history.

Greendale and the other greenbelt towns reflected the influence of the garden city model yet were uniquely American. The towns embodied the foremost principles of architectural design and urban planning of the 1930s, which had developed over a twenty-five-year period and built on the synthesizing of the American planning traditions of informal, naturalistic subdivision design and formal City Beautiful urban centers with garden-city planning principles, which had first appeared in the U.S. in 1908. This synthesis was refined through the defense housing projects developed for the Federal government during World War I, and reinvigorated through the work of the RPAA, as exemplified by the plan for Radburn, New Jersey.

The greenbelt towns were experimental in so far as they were one of a set of previously untried approaches for stimulating the economy during the Great Depression and finding a solution for financing the development and long-term management of pleasing communities of low-cost small homes. The range of arrangements for funding, ownership, and managing public and private New Deal housing developments through the various Federal housing initiatives can be viewed as experimental. The experimental nature of building, financing, and managing large-scale housing development was indicative of Roosevelt's willingness to consult many of the nation's experts and implement a number of different approaches in hopes that collectively they could provide employment for a wide spectrum of skilled and unskilled workers. At the same time, these efforts would foster economic stability and advance progressive national goals, such as resource utilization, land-use planning, rural betterment, community development, the elimination of urban blight, and public recreation. That the nation's

[218] Robert Stern, "The Suburban Alternative for the 'Middle City,'" *Architectural Record* (August 1978), pp. 98-100, as quoted in Creese, pp. 359-360 & en 20.

professional talents were tapped for their professional expertise, skill, and knowledge indicates a deep respect for the societal values as well as pragmatic skills and expertise shared by architects, landscape architects, planners, and artists and a willingness on the part of government officials to work with the professional organizations such as the American Civic Association, the American Society of Landscape Architects, the American Institute of City Planning, as well as the Regional Planning Association of America.

The 1930s reflects a period in which garden-city planning and improved house design were seen as venues for reducing urban blight (and the subsequent need for slum clearance) and solving urban social and economic problems. Rexford Tugwell's utopian vision for self-sustaining, cooperative communities was perceived as radical and failed, and efforts to institutionalize the Neighborhood Unit Plan through state-approved planning statutes proposed by Clarence Perry and Harland Bartholomew failed. Despite persistent efforts, Clarence Stein failed to affect long-term Federal support for garden-city town planning. These failures were the result of a number of factors. Economic factors forced the original community plans to be scaled back and modified to remain within budget; the average income of those able to afford the rents in greenbelt towns exceeded that projected by the early planners. Opposition to what critics perceived as New Deal paternalism and Tugwell's radical views resulted in his departure from Washington and the reassignment of the RA programs to the Farm Security Administration at the U.S. Department of Agriculture. Legal challenges to the government's acquisition of land resulted in the abandonment of the Greenbrook (New Jersey) project and threatened the legality and constitutionality of the whole resettlement idea. Finally, it was the challenge issued from the home-building industry itself and the powerful leaders of the National Association of Real Estate Boards, with their allies in the Federal Housing Administration, which marginalized the government-supported, greenbelt town model in favor of long-term Federally-insured housing investments that were privately owned, mortgaged, constructed, and managed. Such projects, whether designed for large-scale rental purposes or to be sold as private homes, would conform to Federal standards and benefit from the terms of long-term Federally insured mortgages.

Whether viewed as experimental, visionary, or practical demonstrations, the greenbelt towns represent to an unprecedented degree what was possible when the minds and talents of the nation's brightest and most visionary designers, economists, and social reformers were brought together with public backing, funding, and labor. The suburban resettlement program provided an unprecedented opportunity for designers to work in an environment free of profit-driven motives and to respond to the call for better housing as a means for promoting social welfare and creating wholesome communities at a time when the home building industry, which had flourished in the 1920s, came to an abrupt halt. This was a time when the interdisciplinary talents that had convened in 1931 to forge a bright future for home building and home ownership found themselves unemployed and their recommendations unheeded.

Despite their socially minded purpose, the greenbelt towns and other American Garden City projects would come under attack by critics. Most vocal was journalist Jane Jacobs, who in the 1960s blamed the Garden City movement for America's post-World War II suburban sprawl, its lack of character, and the fragmentation of community identity. Railing against the decentralization of the residential suburb, she contended that Ebenezer Howard had "set spinning powerful and city-destroying ideas."[219] Such criticism triggered a debate that continues today. As Professor Emeritus of Planning Ian J.W. Firth points out: "This controversy is in part political, but it is also philosophical.... These continuing arguments...do not diminish the importance of

[219] Jane Jacobs, *The Life and Death of American Cities*, as quoted in Fulton, p. 164.

Greendale, but rather point to its relevance to the continuing search for a well-balanced approach to designing and building American homes and communities."[220]

Timely lessons sprang from the experience of designing and constructing the greenbelt towns; the story of Greendale's creation and its continuing role as a model Garden City community are testaments to a multitude of important factors that coalesced in the mid-1930s and would help define the American suburb of the mid-twentieth century. These include professional collaboration, a multitude of ideas for methods of large-scale development, the value of economic studies and interdisciplinary planning, coordination with regional and state planning, increasing influence of the automobile on American life, and increasing recognition of the socio-economic values of suburban living. By putting all these factors into play, the greenbelt towns, each unique in character but dedicated to a common set of ideals, form an irreplaceable legacy—model communities that still attract scholars and students, planners, architects, historians, sociologists, and economists who ponder the question of whether good and thoughtful design can make both a healthy home and a livable community.

[220] Ian J. W. Firth, electronic correspondence to Alexandra Lord, 1 September 2011. Prof. Firth began his career as a town planner for the English New Towns movement in the 1960s; he has taught town planning and landscape architecture at the University of Georgia, Athens, for more than thirty years.

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Adams, Thomas. *The Design of Residential Areas.* Harvard Planning Series. Cambridge: Harvard University Press, 1934.

_____. *The Building of the City*. The Regional Plan of New York and Its Environs, vol. 2. New York: Committee on the Regional Plan of New York and Its Environs, 1931.

_____. "Part One: The Planning and Subdivision of Land," in "Problems of Planning Unbuilt Areas," Monograph Three, *Regional Survey of New York and Its Environs*, vol. 7, *Neighborhood and Community Planning.* New York: New York Regional Plan Association, 1929, pp. 264-69.

Adams, Thomas, and Robert Whitten. *Neighborhoods of Small Homes.* Harvard Planning Series. Cambridge: Harvard University Press, 1931.

Alanen, Arnold R. "Elbert Peets: History as Precedent in Midwestern Landscape Design," in William H. Tishler, *Midwestern Landscape Architecture*. Urbana and Chicago: University of Illinois Press, and Amherst, Mass.: Library of American Landscape History, 2000, pp. 193-214.

_____. "Elbert Peets (1886–1968)." In *Pioneers of American Landscape Design*. New York: McGraw-Hill, 2000, pp. 293-96.

Alanen, Arnold R., and Joseph A. Eden. *Main Street Ready-Made: The New Deal Community of Greendale, Wisconsin.* Madison: The State Historical Society of Wisconsin, 1987.

Ames, David L., and Linda Flint McClelland. National Register Bulletin: Historic Residential Suburbs, Guidelines for Evaluation and Documentation for the National Register of Historic Places. Washington, D.C.: U.S. Department of the Interior, National Park Service, National Register of Historic Places, 2002.

Arnold, Joseph L. The New Deal in the Suburbs: A History of the Greenbelt Town Program, 1934-1954. Columbus: Ohio State University Press, 1971.

Bargelt, Louise. "Home Building and Remodeling." *Chicago Daily Tribune*, 7 July 1929.

_____. "Home Building and Remodeling." *Chicago Daily Tribune*, 1 March 1931.

Bauer, Catherine. "Good Neighborhoods." *Annals of the American Academy of Political and Social Science* 242 Building the Future City (November 1945): 104-15.

_____. *Modern Housing.* Boston: Houghton and Mifflin, 1934.

Bauer, K. W. "A Greenbelt Town Grows Up." *The American City* 74 (October 1959): 143-148.

Bauman, John F., Roger Biles, and Kristin M. Szylvian, eds. *From Tenements to the Taylor Homes: In Search of an Urban Housing Policy in Twentieth-Century America.* University Park, Pennsylvania: The Pennsylvania State University Press, 2000.

Bennett, Charles B., J. L. Crane, and John Ihlder. *American Planning and Civic Annual* (1938): 194.

Bentley, Harry H. "Residential and Non-residential Construction, Greendale, Wisconsin." January 31, 1936, p. 37.

Bigham, Darrel E. Review of *America's Original GI Town: Park Forest, Illinois* by Gregory Randall. *The Public Historian* 23, no. 3 (Summer, 2001): 109-12.

Birnbaum, Charles A., and Robin Karson, eds. *Pioneers of American Landscape Design*. New York: McGraw Hill, 2000.

Birnbaum, Charles A., and Stephanie S. Foell, eds. *Shaping the American Landscape: New Profiles from the Pioneers of American Landscape Design Project.* Charlottesville: University of Virginia Press, 2009.

Bruce, Albert, and Harold Sandbank. *A History of Prefabrication*. 1943. Reprint. New York: Arno Press, 1972.

"Building Types—Low-Rent Suburban Apartment Buildings." *Architectural Record* 86, no. 3 (September 1939): 88-114.

Buder, Stanley. Visionaries and Planners: The Garden City Movement and the Modern Community. New York: Oxford University Press, 1990.

Cady, David Barry. "The Influence of the Garden City Ideal on American Housing and Planning Reform: 1900–1940." Ph.D. dissertation, University of Wisconsin-Madison, 1970.

Carriker, Robert M. Urban Farming in the West: A New Deal Experiment in Subsistence Homesteads. Tucson: University of Arizona Press, 2010.

Cautley, Marjorie Sewell. "Planting at Radburn." *Landscape Architecture* 21, no. 1 (October 1930): 24-26.

Chorley, Kenneth. "Progress in the Restoration of Colonial Williamsburg," *Architectural Record* 80, no. 5 (November 1936): 337-84.

Christianson, Carol A. *The American Garden City and the New Towns Movement.* Ann Arbor, Michigan: UMI Research Press, Architecture and Urban Design, 1986.

Churchill, Henry S. "Henry Wright 1878-1936." In Donald A. Krueckeberg, ed., *The American Planner, Biographies and Recollections.* New Brunswick, N.J.: Center for Urban Policy Research, 1994, second edition, p. 252.

Colean, Miles L. "An Early FHA Experiment—A Forgotten Chapter in Housing History." *Mortgage Banker* 38, no. 8 (May 1978): 86-88.

"Comparative Architectural Details in the Greenbelt Housing." *American Architect and Architecture* 149 (October 1936): 20-36.

Conkin, Paul K. *Tomorrow a New World: The New Deal Community Program*. 1959. Reprint. New York: Da Capo Press, 1976.

_____. *The New Deal*. 2nd ed. Arlington Heights, Ill.: Harlan Davidson, ca. 1975.

Crane, Jacob L. "Greendale—the General Plan." *The Planners' Journal* 3 (July-August 1937): 89-90.

_____. "Progress in the Science of Zoning." *Annals of the American Academy of Political and Social Science* 155, Part 2: Zoning in the United States (May 1931): 194-201.

_____. "Reflections of a City Planner on His Profession." *Journal of Land and Public Utility Economics* 6, No. 1 (February 1930): 43-50.

_____. "Safety Town." *Public Safety* 11 (August 1937): 28-30.

Creese, Walter L. *The Search for Environment: The Garden City: Before and After*. 1966. Expanded edition. Baltimore: Johns Hopkins University Press, 1992.

Dahir, James. Greendale Comes of Age: The Story of Wisconsin's Best Known Planned Community as it Enters Its Twenty-First Year. Milwaukee: Milwaukee Community Development Corporation, 1958.

"Distinguished Guest to Attend Decennial." *The Greendale Revie*w, 28 May 1948.

Dahir, James. *The Neighborhood Unit Plan: Its Spread and Acceptance*. New York: Russell Sage Foundation, 1947.

Domer, Dennis. "Escaping the City: New Deal Housing and Gustave Ring's Garden Village Apartments." In *Urban Forms, Suburban Dreams* ed. Malcolm Quantrill and Bruce Webb. College Station: Texas A & M Press, 1993, pp. 65-90.

Dreier, John. "Greenbelt Planning: Resettlement Administration Goes to Town. *Pencil Points* 17, no. 8 (August 1936): 400-19.

Eden, Joseph A. "The Aging of a Greenbelt Town: A Planning History of Greendale, Wisconsin." M.A. thesis, University of Wisconsin-Madison, 1981.

Eden, Joseph A., and Arnold R. Alanen. "Looking Backward at a New Deal Town: Greendale, Wisconsin, 1935-1980." *APA Journal* 49 (Winter 1983): 40-58.

Federal Housing Administration. *Modern Design.* Technical Bulletin, no. 2. Washington, D.C.: Government Printing Office, March 15, 1936.

_____. *Planning Neighborhoods for Small Houses.* Technical Bulletin, no. 5. Washington, D.C.: Government Printing Office, July 1, 1936.

_____. *Planning Profitable Neighborhoods.* Technical Bulletin, no 7. Washington, D.C.: Government Printing Office, 1938.

_____. *Principles of Planning Small Houses*. Technical Bulletin, no. 4. Washington, D.C.: Government Printing Office, 1936.

_____. *Principles of Planning Small Houses*. Technical Bulletin, no. 4. Revised. Washington, D.C.: Government Printing Office, 1940.

_____. *Recent Developments in Dwelling Construction*. Technical Bulletin, no. 1. Washington, D.C.: Government Printing Office, 1940.

_____. *Rental Housing as Investment.* Washington, D.C.: Government Printing Office, ca. 1938.

_____. Successful Subdivisions: Principles of Planning for Economy and Protection against Neighborhood Blight. Land Planning Bulletin no. 1. Washington, D.C.: Government Printing Office, 1938.

Feiss, Carl. "Historic Town Keeping." *Journal of Society of Architectural Historians* 14, no. x (December 1956): xx.

Fellheimer, Alfred. "Planning American Standards for Low-Rent Housing." *American Architect* 147 (February 1935): 12-13.

Ferguson, Howard. "Effect of Past Proposed Development upon Financing of School and Village Services in Greendale, Wisconsin." January 1960. Manuscript on file at Greendale Historical Society.

Foster, William Dewey. "Comfort Behind Brick Walls," *Popular Science Monthly*, May 1929.

Freestone, Robert, ed. Urban Planning in a Changing World: The Twentieth Century Experience. New York: E & FN Spon, 2000.

Frew, Minnie. Greendale resident since 1938. Interview with Elizabeth L. Miller. Greendale, Wis., 18 June 2003.

"F.S.A.—Farm Security Administration." *Architectural Forum* 68 (May 1938): 415-24.

"FSA to Permit Private Homes in Model Suburban Villages." *Wisconsin Rapids Daily Tribune*. 19 July 1940: 2.

Gardner, Carl L., and Associates, and Howard Ferguson. "General Plan and Proposed Zoning Ordinance." 1962. Manuscript on file at Greendale Historical Society.

Gebhard, David. "The American Colonial Revival in the 1930s." *Winterthur Portfolio* 22, no. 2/3 (summer/autumn 1987): 109-48.

Gillette, Howard, Jr., "The Evolution of Neighborhood Planning from the Progressive Era to the 1949 Housing Act." *Journal of Urban History* 9, no. 4 (August 1983): 429-33.

Girling, Cynthia, and Kenneth Helphand. *Yard—Street—Park: The Design of Suburban Open Space.* New York: John Wiley & Sons, 1994.

Goldfield, D.R., ed. *Encyclopedia of American Urban History*, vols. 1 & 2. Thousand Oaks, Calif.: Sage Publications, 2007.

"Greenbelt Towns." *Architectural Record* 80 (September 1936): 215-234.

Greendale and the Activities of Its People. Greendale, Wis.: N.p., 1939.

Greendale Design Review Committee. "Information for Purchasers of Lots in Clover Lane Subdivision." October 1945. Manuscript on file at Greendale Historical Society.

Greendale:50 years, 1938-1988. Greendale, WI: Greendale, 1988.

Greendale Remembers: The Story of the Village in the Voices of Its People. Greendale, Wis.: Greendale Historical Society, 1998.

Greendale Review. (Greendale, Wis.) 1940.

Greendale Village Directory. Greendale, Wisconsin: Greendale Woman's Club, 1958; 1960; 1962; 1964; 1967; 1969; 1971; and 1973.

Gries, John M., and James Ford, eds., *President's Conference on Home Building and Home Ownership,* vols. 1-7. Washington, D.C.: National Capital Press, 1932.

Hegemann, Werner, and Elbert Peets. *The American Vitruvius: An Architects' Handbook of Civic Art*. 1922. Reprint. New York: Princeton Architectural Press, 1988.

"Historic Houses of Ski Hill Road." HSOD: The Historical Society of Ogden Dunes. https://odhistory.org/historic-houses-of-ski-hill-road/ (retrieved 8 August 2011).

Hofstadter, Richard. *The Age of Reform: From Bryan to F. D. R.* New York: Vintage Books, 1955.

Howard, Ebenezer. *Garden Cities of To-Morrow.* 1902. 2nd ed. Cambridge: M.I.T. Press, 1965.

Hubbard, Henry V. "The Influence of Topography and the Layout of Subdivisions." *Landscape Architecture* 18 (April 1928): 188-189.

Hubbard, Henry V., and John Nolen. *Parkways and Land Values.* Harvard Planning Series. Cambridge: Harvard University Press, 1936.

Ickes, Harold. "Public Works in the New Deal." *Architectural Forum* 59 (September 1933): 151.

Jandl, H. Ward. Yesterday's Houses of Tomorrow: Innovative American Homes 1850 to 1950. Washington, D.C.: Preservation Press, 1991.

Kirkpatrick, E. L. "Housing Aspects of Resettlement." *Annals of the American Academy of Political and Social Science*. Vol. 190. Current Developments in Housing (March 1937): 94-100.

Knepper, Cathy D. *Greenbelt, Maryland: A Living Legacy of the New Deal*. Baltimore: Johns Hopkins University Press, 2001.

Koyl, George S., ed. *American Architects Directory*. New York: R.R. Bowker Co., 1955.

Kroening, Walter E. "The Story of Greendale: A Government Demonstration in Community Planning and Public Housing." April 1944. Manuscript on file at Greendale Historical Society.

Lampl, Elizabeth Jo. "Greenbelt, Maryland, NHL Nomination", 18 February 1997. https://catalog.archives.gov/id/106775967

Lansill, John S. and Jacob Crane. "Metropolitan Land Reserves As Illustrated by Greendale, Wisconsin." *The American City* 52 (July 1937): 55-58.

Larsen, K. E. "Cities to Come: Clarence Stein's Post-War Regionalism," *Journal of Planning History* 4 (no. 1): 33-51.

Leighninger, Robert D., Jr. *Long-Range Public Investment: The Forgotten Legacy of the New Deal.* Columbia: University of South Carolina, 2007.

Longstreth, Richard. The Drive-in, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914-41. Cambridge: M.I.T. Press, 1999.

Lubove, Roy. Community Planning in the 1920s: The Contribution of the Regional Planning Association of America. Pittsburgh: University of Pittsburgh Press, 1963.

Lynch, Bruce E., and Cynthia D. Lynch. "Washington Highlands Historic District National Register Nomination." 28 September 1988.

Marshall, Douglas Gordon. "Greendale: A Study of a Resettlement Community." Ph.D. dissertation, University of Wisconsin-Madison, 1943.

Mayer, Albert. "Greenbelt Towns Revisited." *The Journal of Housing* 24 (January 1967): 12-23; (February 1967): 80-85; and (March 1967): 153-160.

_____. "The Greenbelt Towns: What and Why." *The American City* 51 (May 1936): 59-60.

Mayer, Albert, Henry Wright, and Lewis Mumford. "New Homes for a New Deal." *New Republic* 81 (December 19, 1934): 157.

McClelland, Linda Flint. "Gardens for Suburbia—The Colonial Revival, Community Planning, and the National Housing Act of 1934." Paper presented at the Colonial Revival in America Conference, Charlottesville, Vir. November 2000.

_____. "Gardens for Suburbia—Revisiting the National Significance of Radburn and Chatham Village." Paper presented at the Annual Meeting of the Organization of American Historians/National Council on Public History, Washington, D.C. April 2006.

McClelland, Linda Flint, Paula S. Reed, and Edith B. Wallace. "Revisiting Radburn: 'Where Art and Nature Combine to Make Good Living Conditions.'" *New Jersey History* 123, nos. 1-2 (Spring/Summer 2005): 38-108.

McDonald, Stewart. Introduction, in FHA, *Planning Profitable Neighborhoods.* Technical Bulletin no. 7. Washington, D.C., Government Printing Office, 1938.

Melvin, Bruce. "Report of the Committee on Farm and Village Housing." In *Farm & Village Housing,* ed. Gries and Ford, vol. 7. Washington, D.C.: President's Conference on Home Building and Home Ownership, 1932.

Milwaukee Community Development Corporation. *Map of the Village of Greendale, Milwaukee County, Wisconsin*. Greendale, Wisconsin: Milwaukee Community Development Corporation, 1955.

Milwaukee Community Development Corporation. *Map of the Village of Greendale, Milwaukee County, Wisconsin*. Greendale, Wisconsin: Milwaukee Community Development Corporation, 1958.

Milwaukee Journal. (Milwaukee, Wisconsin). 1936.

Mott, Seward H. "The Federal Housing Administration and Subdivision Planning," *Architectural Record* 19 (April 1936), 257-63.

_____. "The FHA Small House Program," *Landscape Architecture* 33, no. 1 (October 1942), 16.

Mott, Seward, Max Wehrly, and Harold Lautner, eds. *The Community Builder's Handbook.* Washington, D.C.: Urban Land Institute, 1947.

Mumford, Lewis. *The Culture of Cities*. New York: Harcourt Brace Jovanovich, 1970.

_____. "Mass Production and the Modern House." *Architectural Record* 67, no. 7 (February 1930): 116.

"A New Policy for Housing." *Architectural Forum* (August 1936), pp. 150-53.

Munger, John. Greendale resident since 1938. Interviews with Elizabeth L. Miller, Greendale, Wis., 31 May 2003 and 18 June 2003.

Newton, Norman T. *Design on the Land: The Development of Landscape Architecture*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 1971.

Nolen, John. New Towns for Old: Achievements in Civic Improvement in Some American Small Towns and Neighborhood. Boston: Marshall Jones, 1927.

Osborn, Frederic J. *Green-Belt Cities*. 2nd ed. New York: Schocken Books, 1969.

Nolen, John. "Landscape Architect and Regional and State Planning. *Landscape Architecture* 25 (June 1935): 199-202.

Parsons, Kermit C. "Collaborative Genius: The Regional Planning Association of America." *Journal of the American Planning Association* 60, no. 4 (Autumn 1994): 462-482.

_____. "Clarence Stein and the Greenbelt Towns—Settling for Less." *Journal of the American Planning Association* 58, no. 2 (Spring 1990): 161-83.

Parsons, Kermit C., and David Schuyler, eds. *From Garden City to Green City: The Legacy of Ebenezer Howard*. Baltimore: Johns Hopkins University Press, 2002.

Peets, Elbert. Report of the Town Planning Section of the Greendale Planning Staff, vol. 2, [Washington, D.C.: Farm Security Administration, 1947], pp. 55-56. In collections of Harvard University, The Library of the Departments of Architecture and Regional Planning.

Perry, Clarence A. "The Neighborhood Unit," Monograph One. *Neighborhood and Community Planning,* vol. 7, *Regional Survey of New York and Its Environs.* New York: New York Regional Plan, 1929.

Peterson, John A. *The Birth of City Planning in the United States, 1840-1917.* Baltimore: The John Hopkins University Press, 2003.

Pommer, Richard. "The Architecture of Housing during the Early 1930s." *Journal of the Society of Architectural Historians* 37 (December 1978): 235-64.

Radford, Gail. Modern Housing for America: Policy Struggles in the New Deal Era. Chicago: University of Chicago, 1996.

Randall, Gregory C. *America's Original G.I. Town: Park Forest, Illinois.* Baltimore: Johns Hopkins University Press, 2000.

Reagan, Patrick D. Designing a New America: The Origins of New Deal Planning, 1890-1943. Amherst: University of Massachusetts, 1999.

Reed, Paula S., and Edith Wallace. "Chatham Village NHL Nomination." 5 April 2005. https://catalog.archives.gov/id/71994391

_____. "Radburn NHL Nomination." 5 April 2005. https://catalog.archives.gov/id/135813630

"The Restoration of Colonial Williamsburg." *Architectural Record* 78, no. 6 (December 1935).

Rhoads, William. "The Colonial Revival and American Nationalism." *Journal of the Society of Architectural Historians* 35, no. 4 (December 1976): 247-50.

Robbins, Ira. "Methods of Holding Residential Property." *Annals of the American Academy of Political and Social Science* 190. Current Developments in Housing (March 1937): 109-19.

Robinson & Associates, Inc., and Jeffrey Shrimpton. "Historic Context: Public Housing in the United States, 1933-1949." Draft Report Prepared for the U.S. Department of Housing and Urban Development and the U.S. Department of the Interior, National Park Service, National Register, 1997.

Rogers, Millard. "Village of Mariemont NHL Nomination", 29 March 2007. https://catalog.archives.gov/id/71986457

Rowe, Peter G. *Making a Middle Landscape*. Cambridge: M.I.T. Press, 1991.

_____. *Modernity and Housing*. Cambridge: M.I.T. Press, 1993.

Schaffer, Daniel. *Garden Cities for America: The Radburn Experience.* Philadelphia: Temple University Press, 1982.

Scott, Mel. *American City Planning Since 1890.* Berkeley: University of California Press, 1969.

Smith, Henry Atterbury, comp. *500 Small Houses of the Twenties.* 1923. Reprint of *The Books of a Thousand Homes*, vol. 1. New York: Dover Publications, 1990.

Spreiregen, Paul D., editor. On the Art of Designing Cities: Selected Essays of Elbert Peets. Cambridge: M.I.T. Press, 1968.

Stein, Clarence S. "Greendale and the Future." *The American City* 63 (June 1948): 106-109.

_____. *Toward New Towns for America*. 1957. Revised ed. Cambridge: M.I.T. Press, 1966.

Stein, Clarence, and Catherine Bauer. "Store Buildings and Neighborhood Shopping Centers," *Architectural Record* 75 (February 1934): 174-187.

Szczesny, Christy M. "Americanization in a Greenbelt Town: The Colonial Revival in Greendale, Wisconsin." M.A. thesis, University of Virginia, 2000. (Also, paper presented at Colonial Revival in America Conference, November 2000).

Steiner, Michael C. "Regionalism in the Great Depression." *Geographical Review* 73, No. 4 (October 1983): 430-446.

This is Greendale. Greendale: Greendale Decennial Committee, 1948.

Tishler, William H., ed. *American Landscape Architecture: Designers and Places*. Washington, D.C.: The Preservation Press, 1989.

Tishler, William H., ed. *Midwestern Landscape Architecture*. Urbana: University of Illinois Press, and Amherst, Mass: The Library of American Landscape History, 2000.

Tugwell, Rexford G. "The Resettlement Idea." *Agricultural History* 33, no. 4 (October 1959): 159-164.

_____. "Housing Activities and Plans of the Resettlement Administration." *The Housing Officials' Year Book,* 1936.

Unwin, Raymond. *Town Planning in Practice.* Reprint. 1909. New York: Princeton Architectural Press, 1994.

U.S. Department of Agriculture. Farm Security Administration. "Greenbelt Communities." 25 January 1940.

_____. Farm Security Administration. *Helpful Suggestions for Greendale Residents*. Washington, D.C.: Government Printing Office, 1938.

U.S. Resettlement Administration. "A Description of the Greendale Project." 2 July 1936.

_____. *First Annual Report, 1936*. Washington, D.C.: U. S. Government Printing Office, 1936.

_____. *Greenbelt Towns: A Demonstration in Suburban Planning*. Washington, D.C.: Government Printing Office, 1936.

Vinton, Warren Jay. "A Survey of Approaches to the Housing Problem." *Annals of the American Academy of Political and Social Science* 190, Current Developments in Housing (March 1937): 7-16.

Walsh, Rita. "Greenhills Historic District National Register of Historic Places Nomination." May 1988.

Weiss, Marc A. Rise of the Community Builders: The American Real Estate Industry and Urban Land Planning. New York: Columbia University Press, 1987.

"Winning Home Creating Problem." *Racine Journal Times*. 13 November 1947.

Wood, Edith Elmer. *Recent Trends in American Housing*. New York: Macmillan Co., 1953.

Wright, Gwendolyn. Building the Dream: A Social History of Housing in America. Cambridge: M.I.T. Press, 1983.

Wright, Henry. *Rehousing Urban America*. New York: Columbia University Press, 1935.

Ziarek, Bob. Telephone Interview with Daina Penkiunas. Madison, Wis., 19 July 2011.

10. GEOGRAPHICAL DATA

Acreage: 191.24 Acres

UTM References:	Zone	Easting	Northing
A	16	418084	4754960
B	16	418981	475980
C	16	419163	4754800
D	16	419231	4754580
E	16	419236	4754360
F	16	419253	4754120
G	16	419219	4754020
H	16	419073	4753860
I	16	418491	4753880
J	16	418484	4753950
K	16	418569	4754080
L	16	418492	4754210
M	16	418252	4754280

Verbal Boundary Description:

The boundaries of the Greendale National Historic Landmark District encompass approximately 191 acres in the Greendale Center plat, in Milwaukee County, Wisconsin. The boundaries are indicated on the accompanying Sketch map labeled “Greendale National Historic Landmark District.”

Beginning at the northwest corner at the intersection of Northway and the West Grange Ave. access road and following the south curb line along the access road to the entrance to Avena Ct. where the access road ends; then following the south curb line of West Grange Ave. to the northeast corner of the lot associated with 6396 Blossom Ct.; then following the east rear and side lot lines of the properties associated with Blossom Ct. and Balsam Ct.; then along the north rear and east side lot lines of 5283–5285; then along the north lines of 5593 and 5592 Bluebird Ct.; then along the east lot lines of 5592, 5594–5596, and 5598 Bluebird Ct. At the southeast corner of 5598 Bluebird Ct., the boundary crosses Northway to the south curbline of Northway, then continues east along the curbline to the northeast corner of the lot associated with 5600–5610 Badger Ct.; then along the east boundaries of 5600 through 5620 Badger Ct. to the point where the boundary meets the designated parkland. The boundary follows east and south along the boundary of the parkland to the point where it meets the northeast corner of the lot associated with 5692–5698 Cardinal Ct. At the southeast corner of this property, the boundary crossed Schoolway to the northeast corner of the lot associated with 5700–5710 Cardinal Ct., then turns south and then west along the property line crossing Cardinal Ct. to the south boundary of 5701–5711 Cardinal Ct. continuing to the rear lot lines of the houses along Clover Lane. The boundary then follows the east lot lines of the Clover Lane properties to the designated parkland. The boundary then follows the parkland boundaries as it meanders to Loomis Road, then along the parcel line along Loomis Road, then turning southwest to where the boundary meets Southway. The boundary then continues along the south curb of Southway, across Broad St., then along the north curbline of Southway along the open parcel to the point where it meets the southeast boundary of the parcel of the house on Catalpa St. The boundary then follows the rear lot lines of the houses on Catalpa St., then along the south curbline of Catalpa St. to the point opposite the southwest corner of the lot associated with 5917–5921 Dendron Lane. The boundary then follows the rear lot lines on the east side of Dendron lane, crosses Dellrose, continues along the rear lot lines until reaching the rear lot lines associated with the houses along Conifer Lane. The boundary follows the property lines associated

with Conifer Lane to the lot line of 5813–5823 Dendron Lane, then north and east along said property line, then crossing Dendron Lane and following the west and north lines of the lot associated with 5808–5812 Dendron Lane. Then north along the west lot line of 5801–5808 Dale Lane to Crocus Ct. The boundary then crosses Crocus Ct. and follows the north curbline to the point corresponding to the rear lot of the commercial buildings at 5711 and 5741 Broad St. The boundary then proceeds north along said lot line to the land associated with the school grounds. The boundary then follows the lines of the school grounds to the point where they meet the southwest lot line of the property associated with 5613 Apricot Ct. The boundary proceeds north along the rear lot lines of 5613 through 5601 Apricot Court to the south curbline of Northway. The boundary then proceeds along the southern and western curb of Northway until it reaches West Grange Ave. where it proceeds east along the southern edge of West Grange Ave. until it reaches the point of beginning.

Boundary Justification:

The boundaries of the Greendale National Historic Landmark District enclose all those resources that are historically associated with the development of Greendale during the period of Federal ownership, 1936 to 1952, and lie within the Village of Greendale plan as designed by Peets and Crane in 1936 and laid out between 1936 and 1938. The boundaries exclude areas that were laid out and developed after 1952. In some cases noncontributing buildings are included within the boundaries because they appear on streets that were designed in 1936 and set in place with curbs, pavement, and utilities in the community's initial phase of construction, 1936 to 1938.

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NATIONAL HISTORIC LANDMARKS PROGRAM

ACCOMPANYING DOCUMENTATION

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Photographs by Elizabeth L. Miller

Date: April 2003

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Photograph 8 of 14. View of 5589-5599 Butternut Ct. looking northeast.

Photograph 9 of 14. View of 5587-5589 Angle Lane looking west.

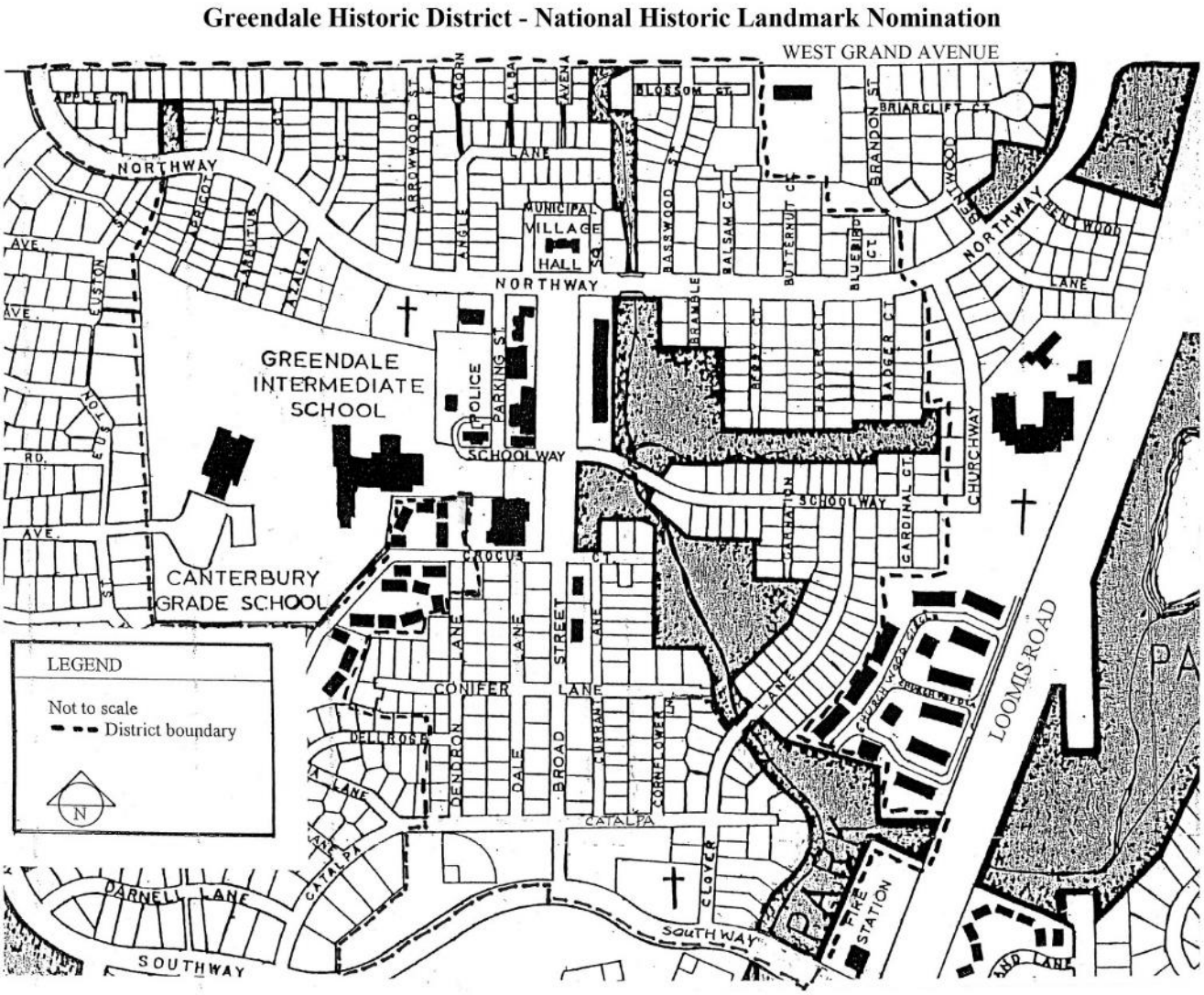
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Photograph 11 of 14. View of 6808-6810 Northway looking northeast.

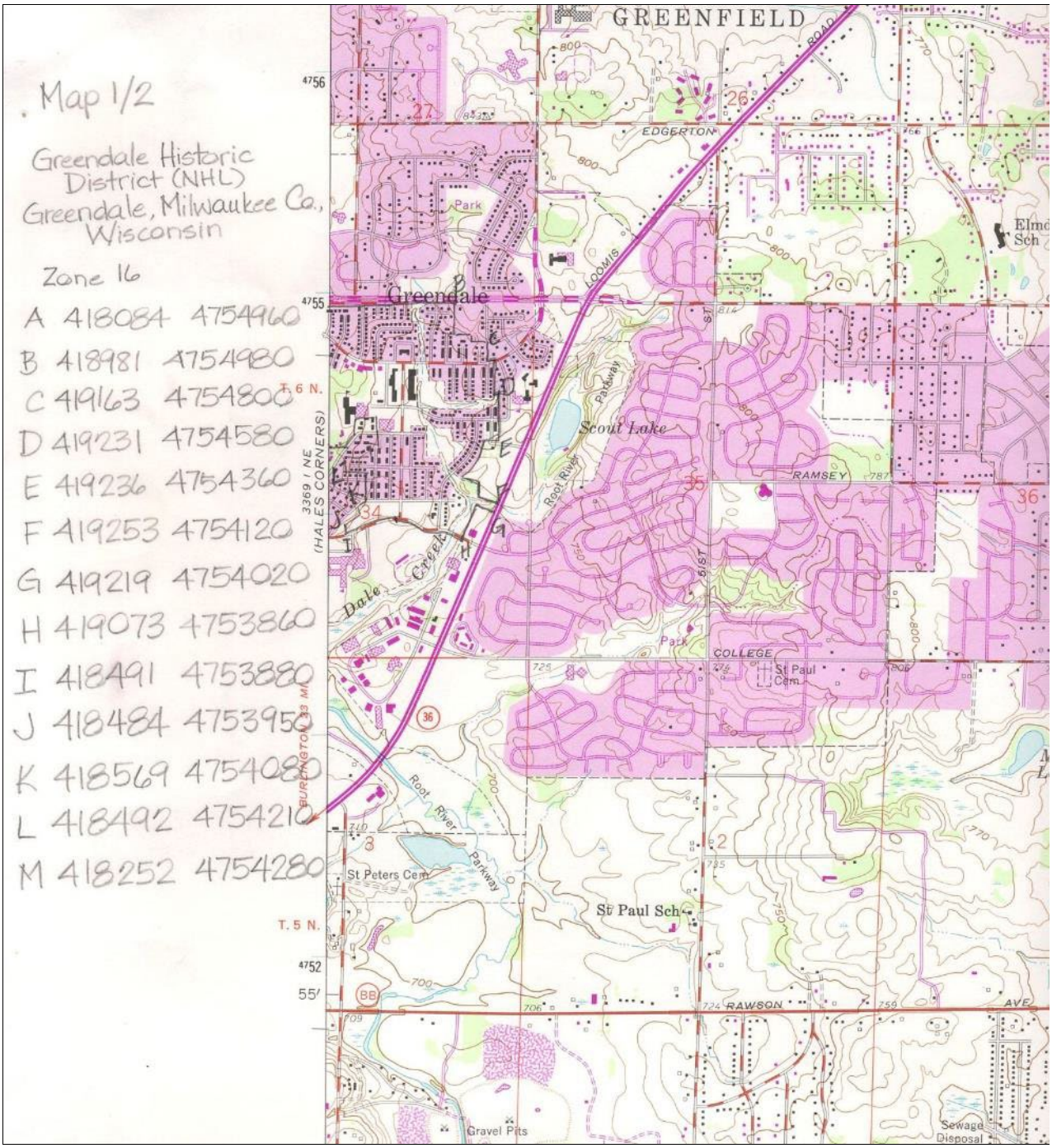
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Photograph 13 of 14. View of 6404-6406 Conifer Lane looking north.

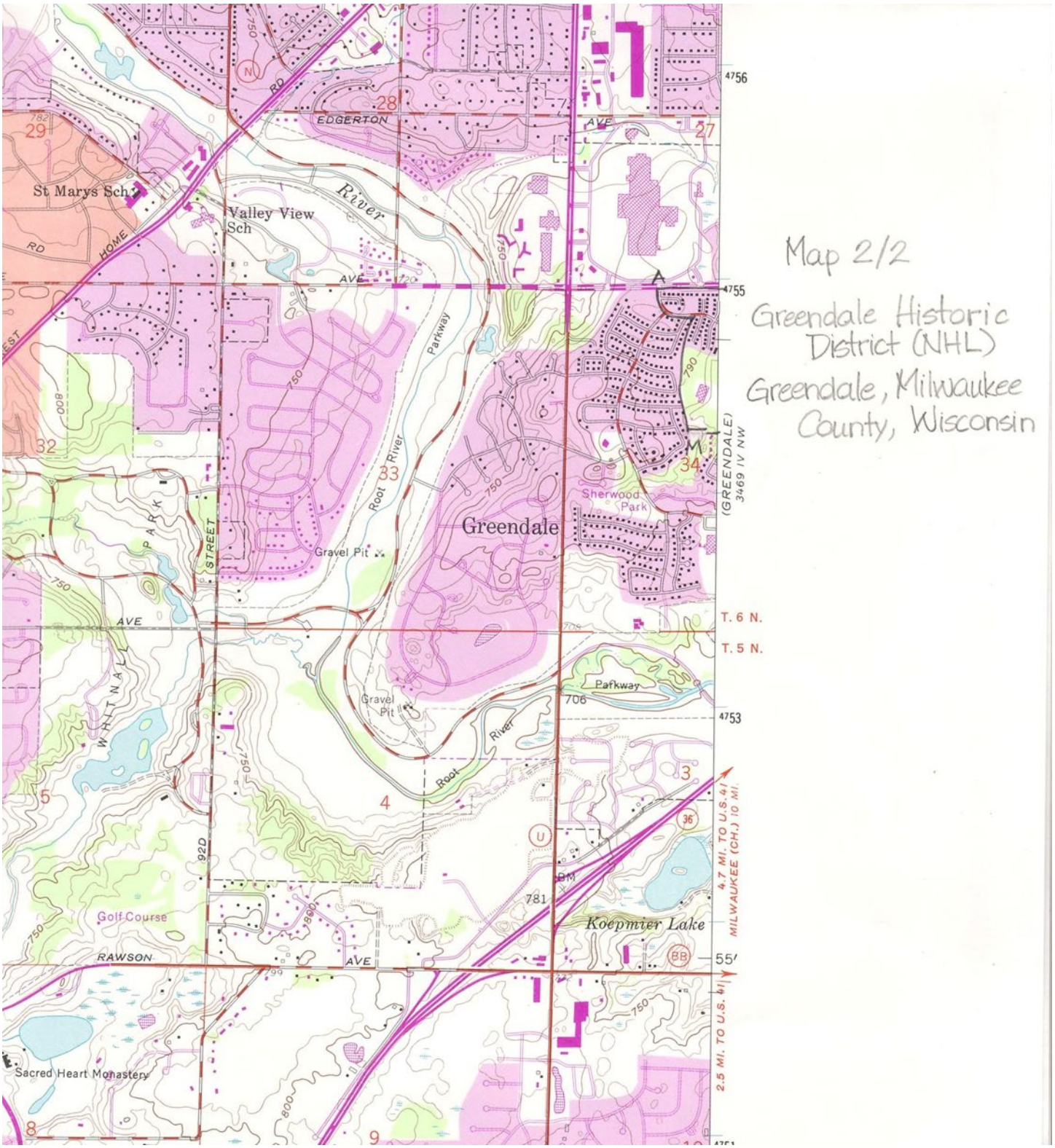
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Map 1: Greendale NHL Boundary Map



Map 2: USGS Map with Greendale NHL Boundary, 1 of 2



Map 3: USGS Map with Greendale NHL Boundary, 2 of 2

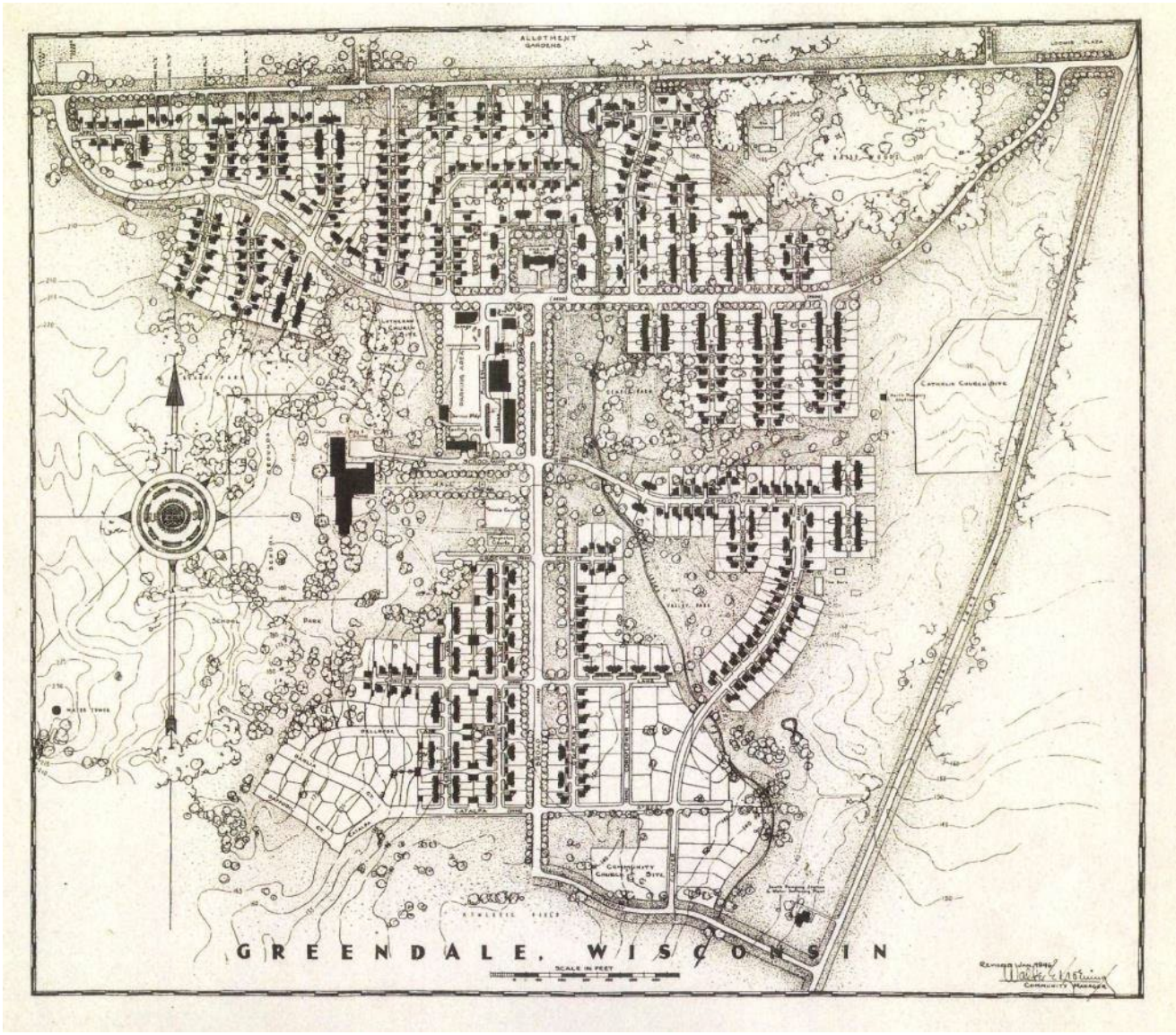


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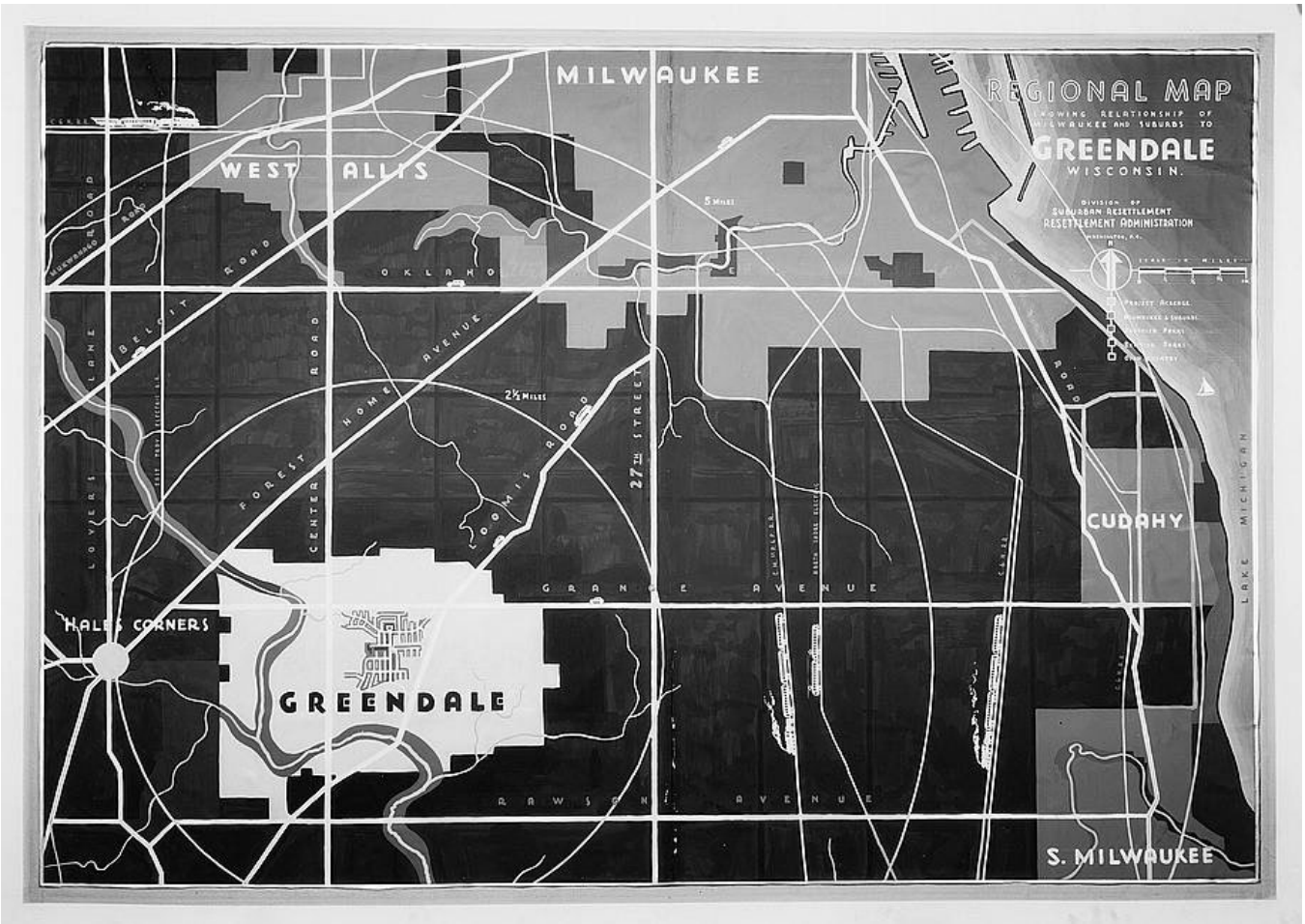
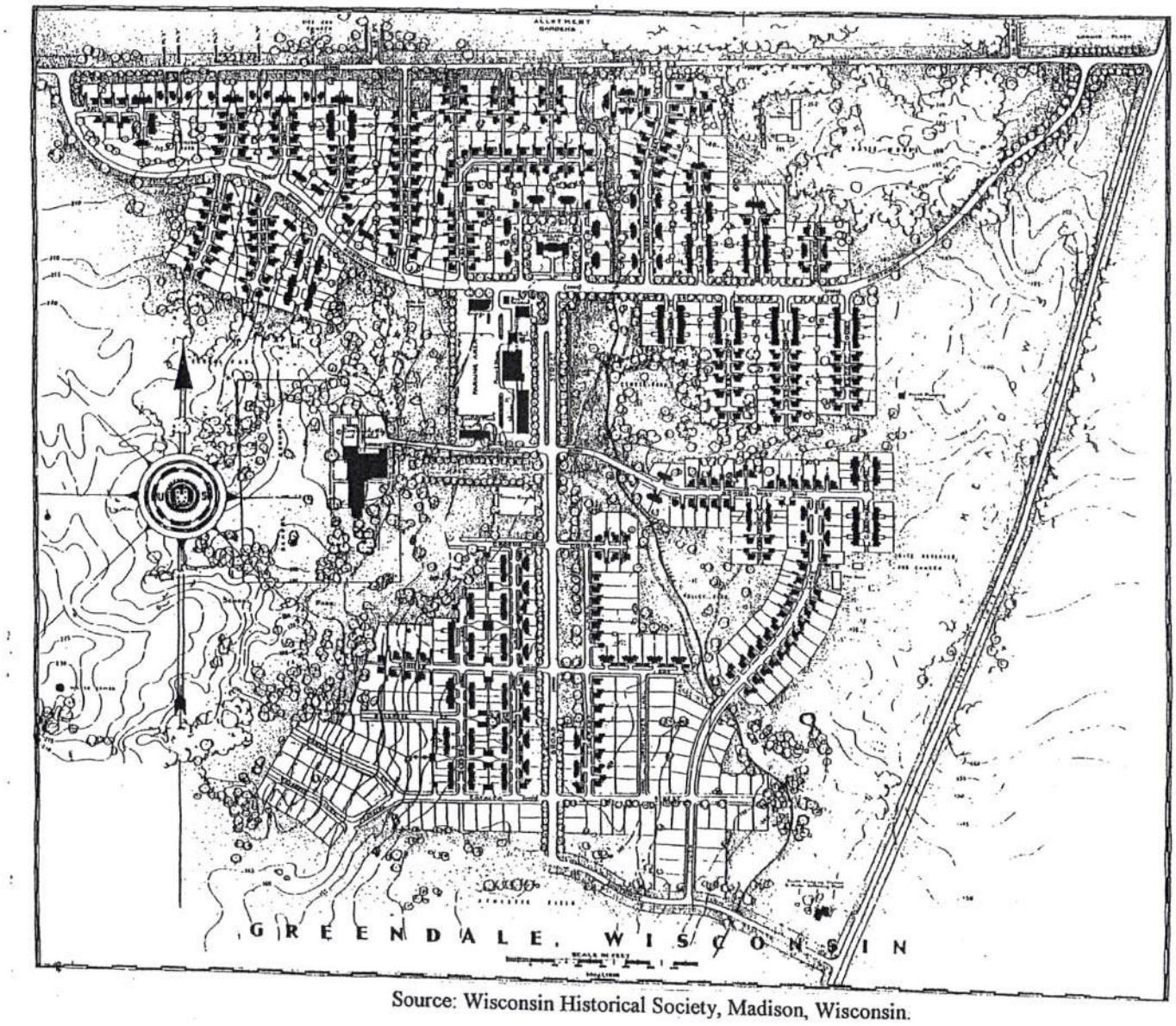


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Source: Wisconsin Historical Society, Madison, Wisconsin.

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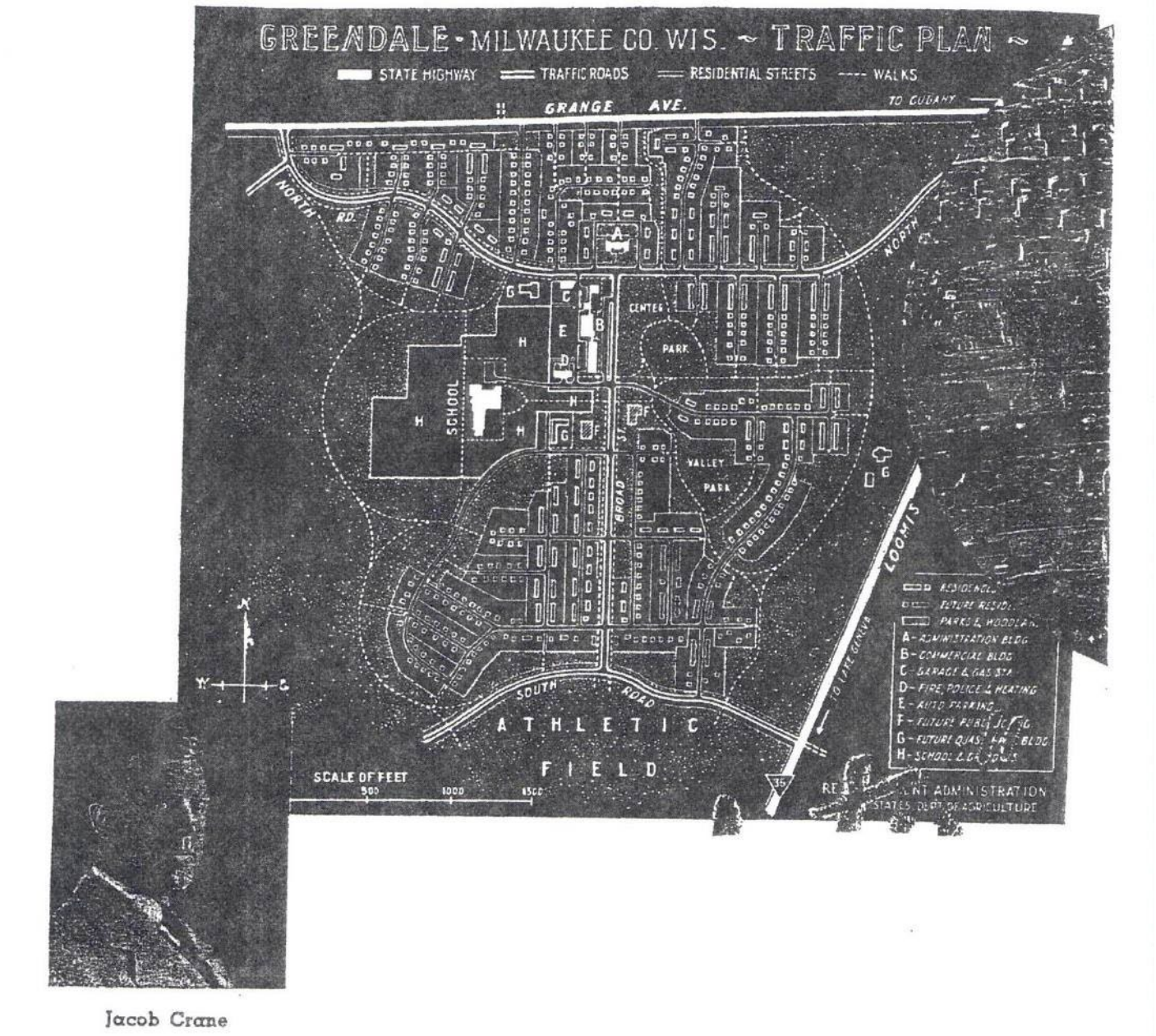


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Figure 11. Single-family house at corner of Apple Ct. and Northway, with side court or *Hof* and landscape details—street sign, curbs, hydrant, and hedge plantings, Sept. 1939. Photograph by John Vachon, Farm Security Administration. Courtesy Library of Congress, Prints and Photographs Digital Collection.

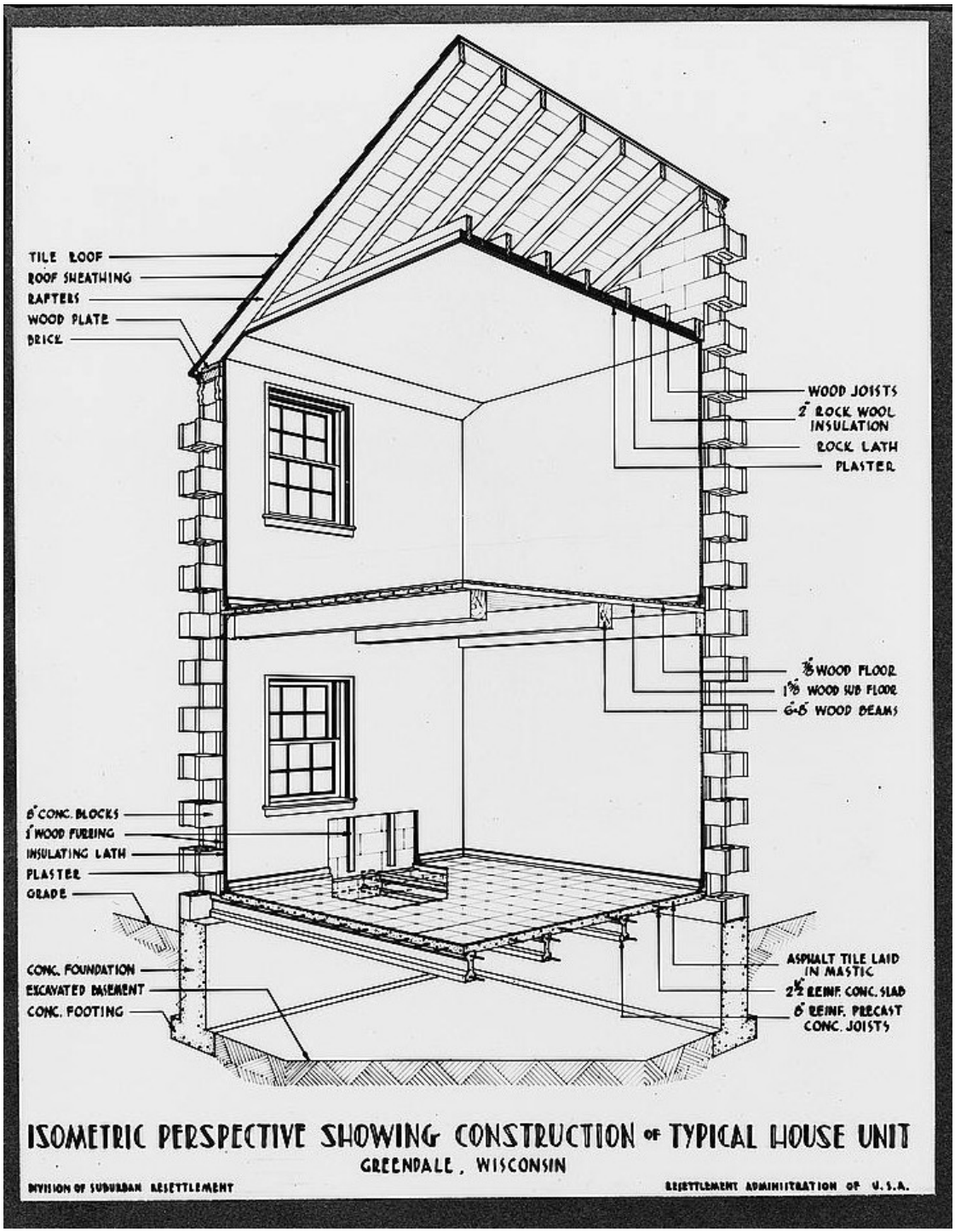


Figure 12. Isometric perspective showing construction of typical house unit. Note shallow foundation and first-floor reinforced concrete slab and joists. Courtesy Library of Congress, Prints and Photographs Digital Collection.

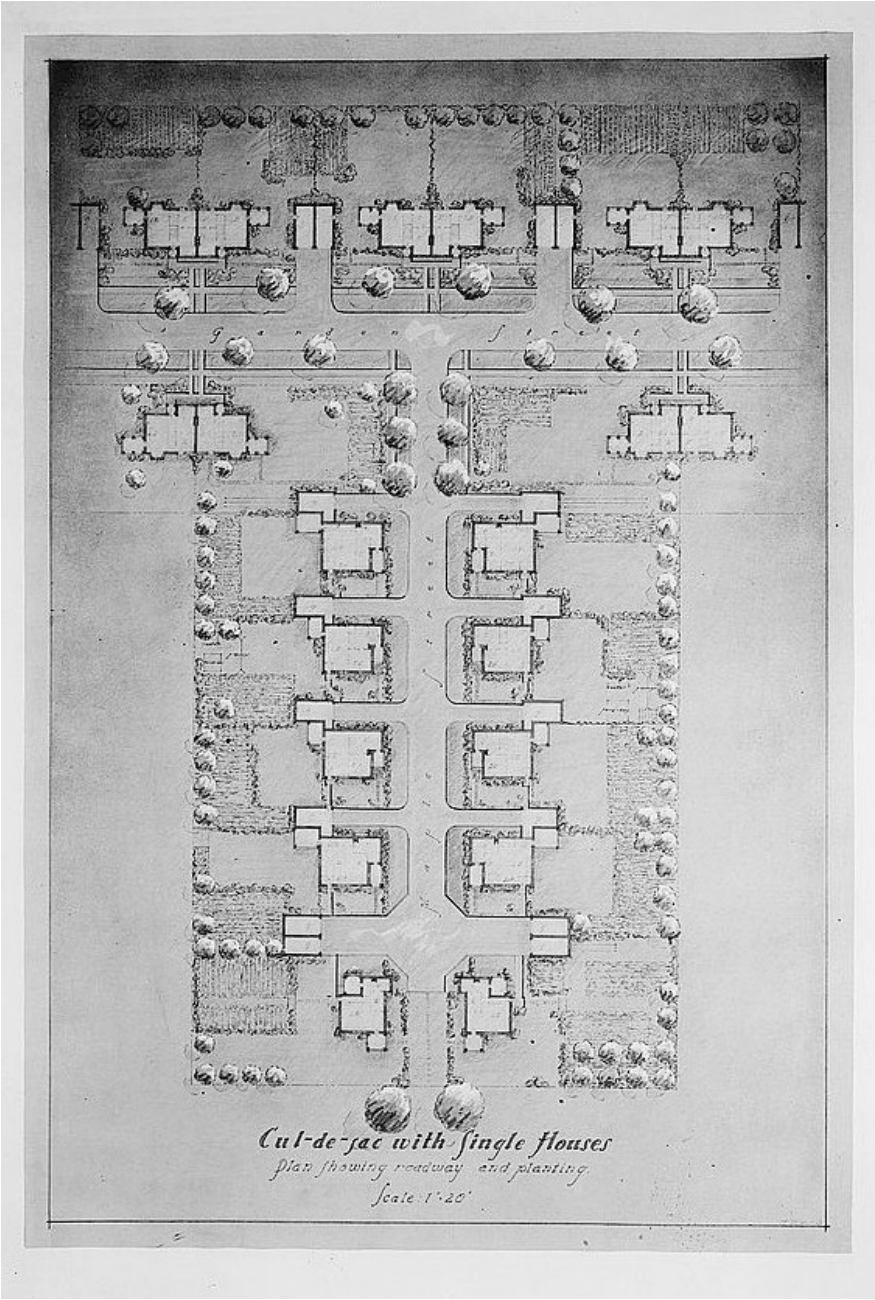


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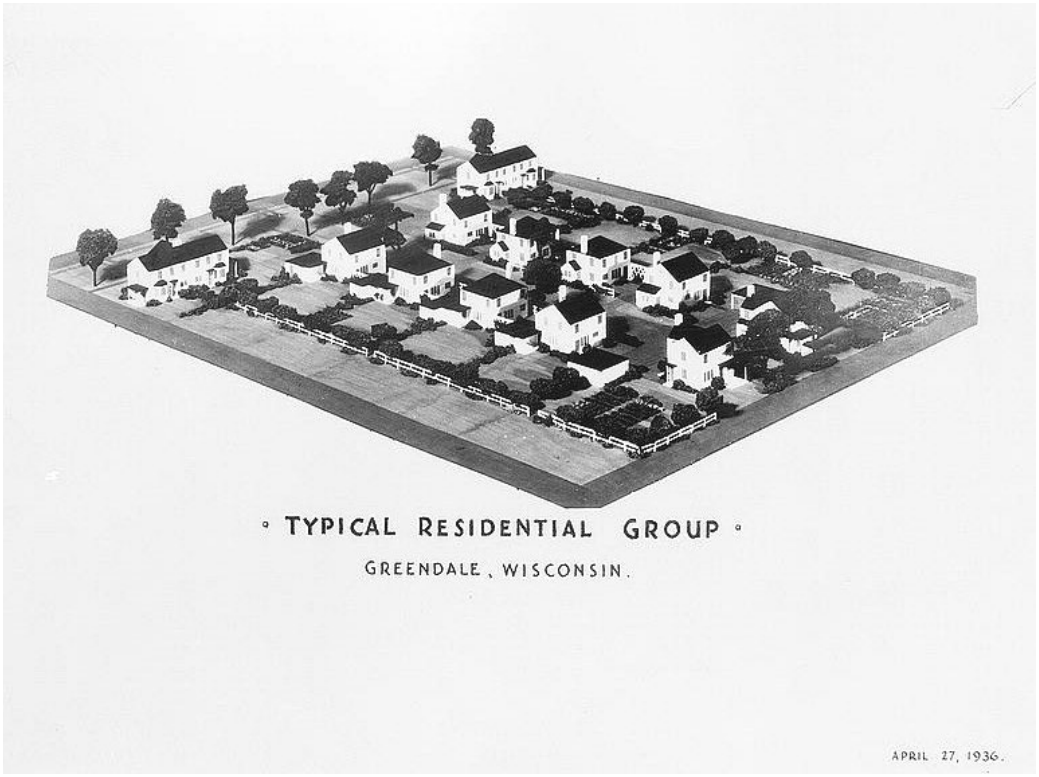


Figure 14. Model of typical residential group, 1936. Courtesy Library of Congress, Prints and Photographs Digital Collection.

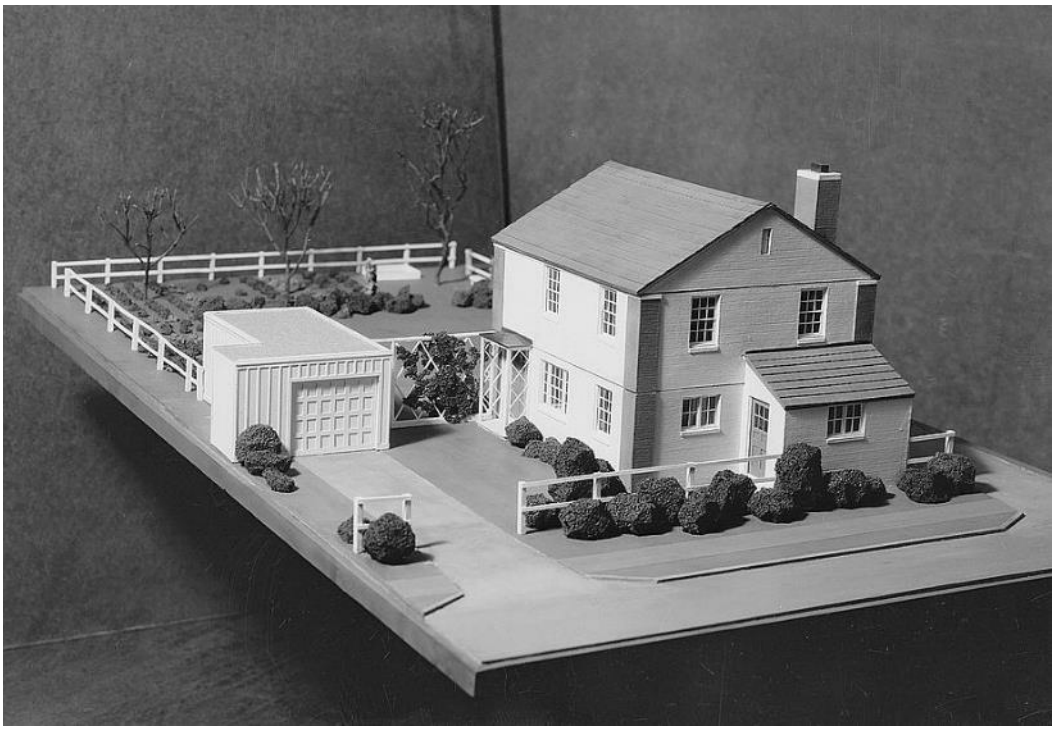


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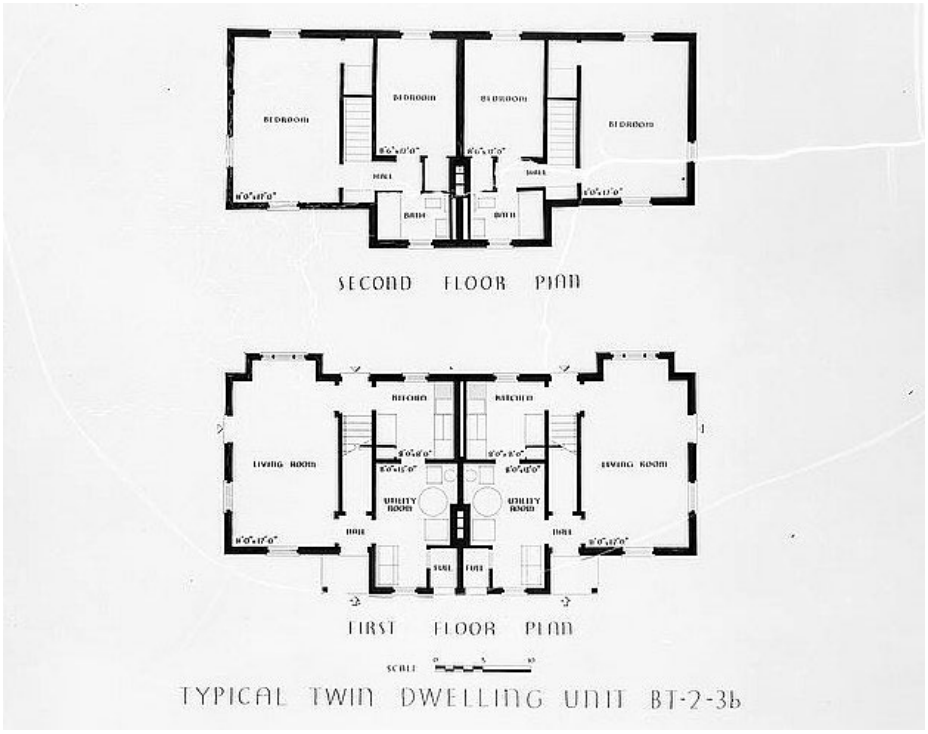


Figure 20. Floor plan of typical twin dwelling (BT-2-3b), 1936. Courtesy Library of Congress, Prints and Photographs Digital Collection.

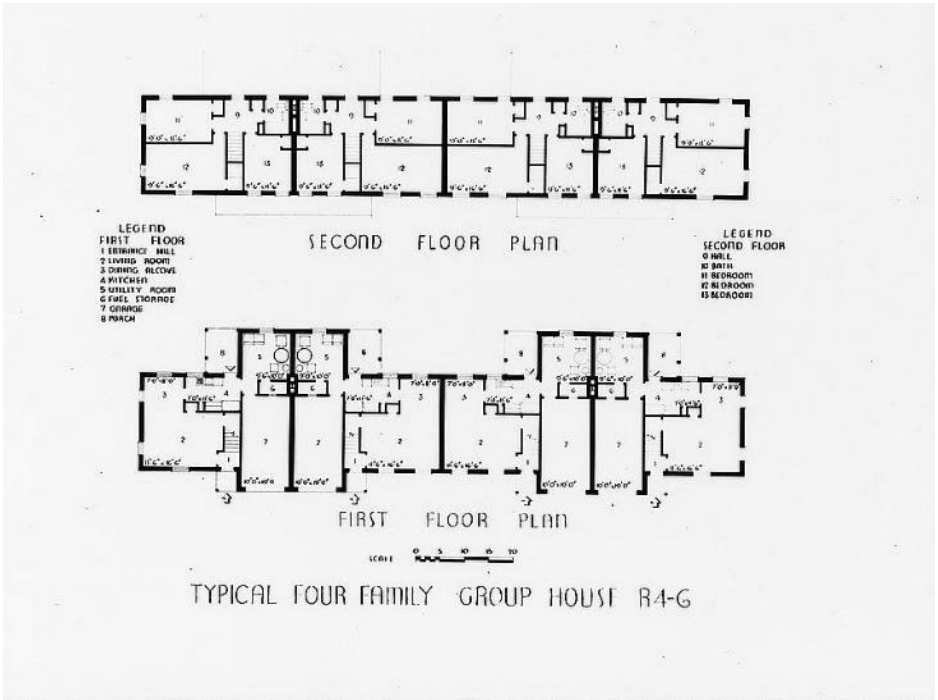


Figure 21. Plan of typical four-family group house (R4-G). Courtesy Library of Congress, Prints and Photographs Digital Collection.



Figure 22. View of four-unit row dwelling under construction. Photograph by Russell Lee, Farm Security Administration, March 1937. Courtesy Library of Congress, Prints and Photographs Digital Collection.



Figure 23. Garden-side view of four-unit row dwelling. Photograph by John Vachon, Farm Security Administration, Sept. 1939. Courtesy Library of Congress, Prints and Photographs Digital Collection.



Figure 24. Greendale design studio in the McLean-Walsh Mansion, Washington, D.C. Photograph by Carl Mydans, Farm Security Administration, February 1936. Courtesy Library of Congress, Prints and Photographs Digital Collection.



Photograph 1. Commercial center at 5601-5651 Broad St., view looking southwest.



Photograph 2. Single-family “chain” houses at 5578-5584 Basswood St., view looking south.



Photograph 3. Flagpole sculpture by artist Alonso Hauser on the Mall, Former Police Station (at left), and Parking St. (at right), view looking north.

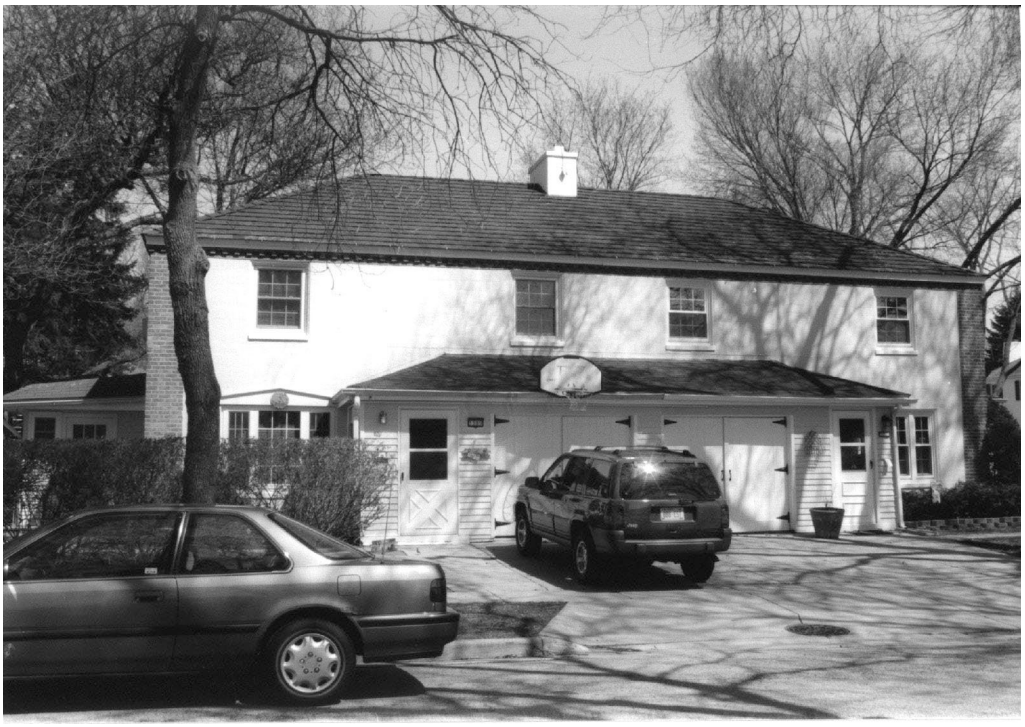


Photograph 4. Village Hall at 6500 Northway, view looking north.


Photograph 5. Single-family house with ell at 5590 Azalea Ct., view looking northeast.



Photograph 6. Pathway to school through School Woods, view looking southeast.



Photograph 7. Twin dwelling at 5587-5589 Municipal Square, view looking north.



Photograph 8. Six-unit row dwelling at 5589-5599 Butternut Ct., view looking northeast.



Photograph 9. One-story twin dwelling at 5587-5589 Angle Lane, view looking west.



Photograph 10. Single-family houses at 5567-5573 Angle Lane, view looking west.



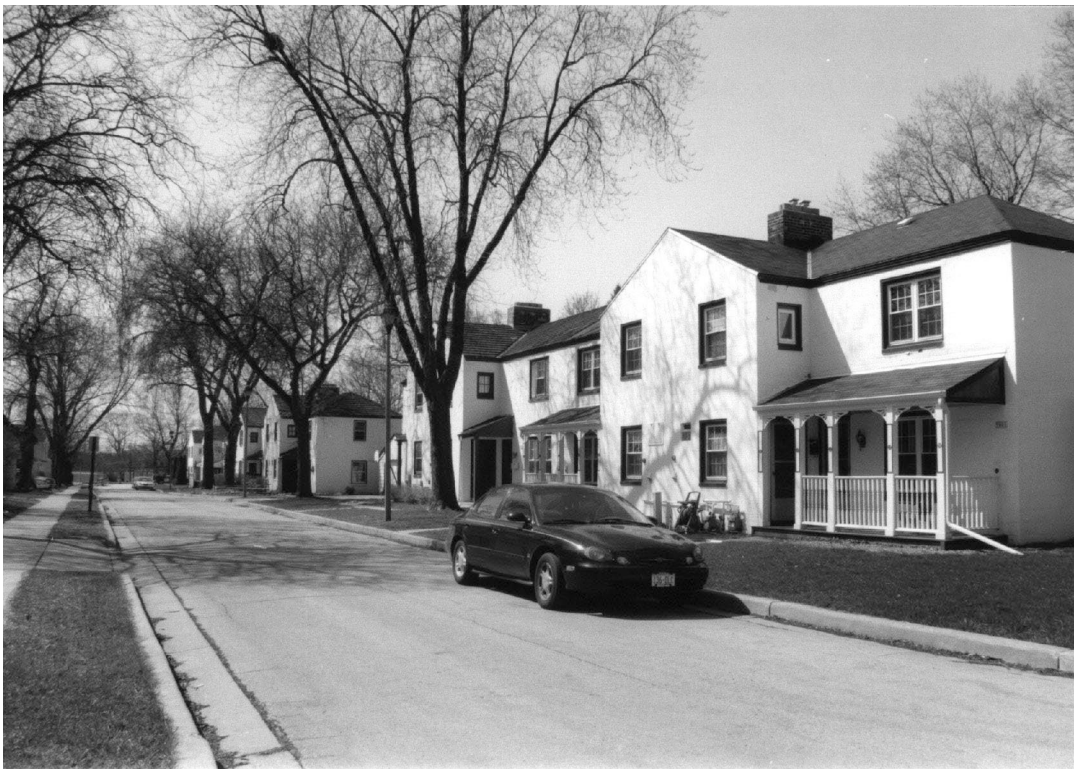
Photograph 11. One-story twin dwelling at 6808-6810 Northway looking north.



Photograph 12. Bend in road near 5590-5598 Azalea Ct., view looking north.



Photograph 13. Two-story twin dwelling at 6404-6406 Conifer Lane, view looking north.



Photograph 14. Four-unit row dwelling at 5901-5907 Dale Lane, view looking southwest.