

“A MULTITUDE OF LITTLE WORRIES”
THE CONSTRUCTION OF CLARENCE S. STEIN’S HILLSIDE HOMES
1934 TO 1935

A Thesis
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by
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ABSTRACT

This thesis explores the construction of Hillside Homes, one of the first publically funded lower-income housing developments in the United States. It was built in New York City during the depths of the Great Depression and designed by Clarence S. Stein, a lauded architect and community planner. While Hillside has been a topic of discussion in previous theses and other scholarly works, none have been so dedicated to the project's construction as this one. Through a close analysis of the many components that impacted Hillside's development, this thesis sheds additional light on how and why Hillside took shape as it did. Hillside's planning techniques borrowed from World War I building methods and Ebenezer Howard's ideas on garden cities while its architectural form employed traditional materials applied in a stripped down, modernist manner. To show how Hillside fit within the context of its time, this thesis begins broadly with an analysis of residential building trends of the 1910s and 1920s. The analysis then focuses in on Hillside itself, first examining the project during its planning and design stage before moving on to the primary emphasis of Hillside under construction. Hillside's developers intended that the project be a model of what could be accomplished when public and private entities joined together to create quality affordable housing that employed novel methods. While not able to achieve the initial goal of providing housing for working class people, once complete, Hillside stood solid as a complex of brick buildings. Its apartments and community spaces contained features typically reserved for higher end housing but its first tenants were amongst New York City's lower-middle class. Hillside remains today, representative of now-accepted construction practices as well as financing tools that were then in their infancy.

BIOGRAPHICAL SKETCH

Caitlin Kolb was raised in Omaha, Nebraska, the third eldest in a line of ten children. Growing up with a fondness for old buildings and the stories they tell, Caitlin decided in high school to pursue a career in historic preservation. She attended Loyola University Chicago and received a Bachelors of Arts in History in May 2010. After college, Caitlin remained in Chicago for a year, working at the Frank Lloyd Wright Preservation Trust. In August 2011, Caitlin began the Historic Preservation Planning program at Cornell. During her time in Ithaca, Caitlin volunteered with Historic Ithaca, receiving hands-on training in the art of furniture restoration, amongst other tasks. In May 2013 Caitlin completed the degree's course requirements and in August moved home to Omaha. In September, Caitlin was hired as a historic preservation specialist by Alley, Poyner, Macchietto Architecture where she has put her hard-earned preservation skills to good use. In January 2014, Caitlin completed her thesis, the only thing standing between her and a master's degree. Her next goal is to document all of the condemned and demolished properties in Omaha.

This thesis is dedicated to my grandfather, Andrew Weckinger, who worked as a bricklayer when he first came to America from his native Hungary.

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INTRODUCTION

When a person first encounters a building, or grouping of buildings, whether it is in an urban or rural setting, it is likely his or her first thought turns to the immediately tangible, such as the decorative features that make the façade distinct. A keener eye might focus in on the arrangement of those features and what types of materials are or are not present and then use this information to determine which architectural movement influenced the designer or who the architect was that formulated the design. What is less often considered, but is of no less importance, are the economic, legislative, and technological shifts that affected the overall plan as well as a keener understanding of the many people and events that helped to make the vision a reality.

Between World War I and World War II, the American landscape changed quite drastically.¹ New York City in particular is a striking example. Here an economic boom after World War I caused Manhattan and the outlying boroughs to grow and spread in response to a sharp influx in population, which necessitated a tremendous building campaign. Private investment, by way of for-profit speculative builders or altruistic foundations, worked to provide housing for the influx of citizens, some new and some returning from living elsewhere during the war.² As demand quickly outpaced supply, materials prices surged and the labor pool diminished.

Within a few years, however, the building windfall came to a halt. Men still eager for work and high wages watched as construction slowed immediately before and after

¹ United States Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1970* (Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, 1975).

² Richard Plunz, *A History of Housing in New York City: Dwelling Type and Social Change in the American Metropolis* (New York: Columbia University Press, 1990), 122, 123.

the 1929 stock market crash. During the Depression, increased government involvement, not present since the conflict-ridden days of World War I, helped to finance many projects. With the feverish building days of the 1920s behind them, it was now a time of scarce financial resources. One of the few positive notes to the decrease in construction competition was that materials and labor were now easier to secure and at a comparatively favorable price than previously available, making some building projects more feasible to accomplish than during the booming Twenties.³

Technological advances that affected how and when buildings were constructed and who took part in the erection process assisted the shifting appearance of the urban streetscape. Increased mechanization allowed for greater productivity and introduced new types of materials to the market. The separate building trades became increasingly competitive for work as more efficient techniques with machines took on greater significance, threatening many tradesmen's livelihoods. Jurisdictional disputes often arose as one building trade fought with another over the right to install novel materials or oversee the operation of a new machine. Because of organized laborers' ability to draw in other trades to their cause, such fighting had the potential to threaten the stability of the industry at a local, regional, or even national scale.⁴

As changes came to the cityscape and the residential building industry many socially minded men and women concerned with the lack of quality in the affordable residential options introduced new ideas on how best to house the metropolis' low-

³ Plunz, *A History of Housing in New York City*, 124-125, 313; *The New York Times*, "Decrease in 1929 in New Housing," July 6, 1930. <http://proquest.com>.

⁴ James C. Young, "New York Rebuilds Itself on a Huge Scale," *The New York Times*, June 27, 1926, <http://proquest.com>; Grace Palladino, *Skilled Hands, Strong Spirits: A Century of Building Trades History* (Ithaca, N.Y.: Cornell University Press, 2005).

income residents. Clarence S. Stein, architect and planner, was one such social reformer. Observing the widespread changes then taking place in city building and residential design, Stein collaborated with like-minded persons to provide concrete solutions to New York's early 20th century "housing problem." Stein advocated for a new way of building in which land purchase, site design, and construction took place in an integrated fashion. Unlike the "customary haphazard development of [the] urban environment through a series of unrelated processes," Stein called for building as a "single operation or a series of related large-scale operations."⁵ Such developments, Stein asserted, would be "planned and built by trained technicians working as an organized group" and be ultimately much better suited to "our modern needs and what is quite as important, fitted to our pocketbooks."⁶

The solutions Stein and his colleagues devised borrowed from site design principles developed in Europe and nascent construction innovations then slowly emerging in the United States. The designs of the buildings themselves also mixed Old World and New, using brick as the primary building material in the fashion of English and Dutch houses. Stein designed four large-scale residential developments in the New York City area between the World Wars, three of them in the metropolis itself. He hoped that these projects, along with others he contributed to as a consultant, might influence home building on a national and international level.⁷

⁵ Clarence Stein, "Housing and the Depression," *The Octagon* (June 1933): 3, Clarence S. Stein Papers, Collection #3600, Division of Rare and Manuscript Collections, Cornell University Library, Ithaca, New York, Box 5, Folder 36.

⁶ Ibid.

⁷ Clarence S. Stein, *Towards New Towns For America* (Cambridge, Mass.: M. I. T. Press, 1969), 217-227.

In New York City, the culmination of Stein's conscientious design schemes resulted in Sunnyside Gardens (1924-1928), Phipps Garden Apartments (Phase 1:1930-1931 and Phase 2:1935-1936), and Hillside Homes (1934-1935). All three of these developments required Stein to manipulate the established ordered grid in order to create what he considered to be more livable dwellings. On the outskirts of New York City, Stein was freed from the grid to design a more integrated community. At Radburn, New Jersey, Stein, along with design partner Henry Wright, placed homes and community buildings amongst expansive green spaces. One of the most innovative features of this "Town for the Motor Age," as it was called in promotional materials, were the separated pathways that kept pedestrians safe from passing motorists. Stein based his designs for all four developments upon Ebenezer Howard's English Garden Cities and the idea of the superblock in which the open space, rather than buildings, predominate.

With his communities, Stein strove to create "New Towns" that would radically change the way that people lived and worked. Stein envisioned these New Towns as "orderly...limited-size communities... surrounded by open country" that placed people in close relation to their workplaces as well as shops and other facilities. Whether located close to a metropolis or on the fringes of suburbia, each was to be a "new city" carefully "conceived, planned, and carried out as large-scale units."⁸ Unfortunately, Stein never managed to create a true New Town with any of his developments. He noted in 1956, "none of them was comprehensive enough in scale or function to fully deserve the title."⁹

Frequently, studies on Stein, and those who worked alongside him on housing issues, tend to concentrate upon his projects' design beginnings and realized construction.

⁸ Stein, *Towards New Towns For America*, Forward.

⁹ Stein, *Towards New Towns For America*, Forward.

The intermediate period, that time after the initial idea takes hold but before the final design is realized, often plays a subordinate role to the more prominent foci of start and finish. When the process of construction is discussed, such as Stein's advocacy for efficiency and standardization in design, there is rarely an attempt to delve deeper into the framework in which he developed these ideas. This analysis shifts the spotlight to a frequently overlooked place in the design process, the construction phase.

Stein's Depression-era development, Hillside Homes, located in New York City's Borough of the Bronx, provides the focus of the analysis. While the development itself is unique, with its own distinct list of players, site, and design, what happened at Hillside during the Depression years is indicative of larger changes than occurring in the residential building industry. Hillside was built at a time of shifting perceptions on who should finance affordable housing. It was also a time of steady advances in building technology.

Stein's name has frequently come to be synonymous with this and his other developments, however, they were not a "one man show." Rather, Stein collaborated with other architects and planners in the early stages of Hillside's design. He then worked closely with builders, developers, and even fellow designers to gain the necessary political, economic, and social support needed for the materialization of the project to occur. Just as important towards ensuring that the idea for Hillside became a physical concept was the brute strength and considerable skills of laborers and tradesman.

Hillside Homes is chosen to shed light on the shifts and stagnations in the residential building industry that took place between the World Wars. The increased emphasis upon mechanization in all industries, including that of building, coalesced with

emerging ideologies on proper housing methods and the need for innovative financing schemes, resulting in the Bronx development. Hillside Homes, constructed from 1934 to 1935, went up during a time of turmoil when the nation was desperately searching for solutions to escape an economic sinkhole. The project, a complex of four- and six-story inter-connected apartment buildings, was envisioned as a viable community near Manhattan that would give jobs to thousands while under construction. Once complete, Hillside's developers promised it would provide housing for over a thousand lower-income families.

Looking back on his accomplishments in the 1950s, Stein declared, "Every job should be a laboratory. Customary plans, forms or construction methods should be constantly questioned and analyzed. Fresh exploration and investigation is required to keep both architecture and community organization alive and contemporary."¹⁰ This thesis analyzes the methodologies and materials utilized by Stein and his collaborators at Hillside Homes to determine if they do indeed reflect the designers' humanistic viewpoints. This thesis also analyzes what constraints the project's leaders were forced to contend with due to contemporary economic, political, and societal prescriptions and how these limitations may have impacted the final product. Of particular interest will be the people actively engaged with the site on a daily basis; the events that affected what aspects of the design were achieved; as well as historical shifts in the building industry and society as a whole that affected the site design and construction processes.

The diverse mix of primary source material available for Hillside, in the form of newspaper articles, correspondence, speeches, writings, drawings, photographs, and

¹⁰ Stein, *Towards New Towns For America*, 35.

promotional materials, provided a strong platform on which to build this thesis.

Documents from Stein's archival collection, including letters exchanged between Stein and his wife, Aline McMahon Stein, allowed for a keener understanding of Stein's thought process and his feelings of hope and despair throughout Hillside's design and construction phases. A particularly gratifying find that adds much to the discussion came in the form of three books produced in 1935 by local schoolchildren at P.S. 78, a public elementary school adjacent to the Hillside site. Within the pages of these books are intimate details tracing the course of the development's construction. Documents related to the development on file at the Bronx Building Department, journalistic accounts from the archival collection of Nathan Straus, Jr., and previous theses written on Stein and his communities provided additional site-specific material. Newspaper articles and secondary source material related to the early 20th century building industry, residential design trends, New York City's development, and the goals and visions of Clarence Stein and his collaborators helped to set the analysis within a broader framework.

The body of this thesis consists of three chapters. The first chapter explores the local and national conditions that stimulated the development of Hillside Homes, concentrating specifically upon the early 20th century housing problem and advancements made in the residential building industry. The second chapter analyzes the planning stage of Hillside Homes, laying out the process of design, collaboration, and controversy that marked the days of Hillside as an idea. The third chapter examines the actualities of construction and the problems and events during construction that impacted, or attempted to impact, the eventual realization of the design. Because Hillside's construction took place within the larger context of a big, bustling city grappling with the difficulties of the

Great Depression, events in New York City that transpired during the construction phase and that impacted Hillside either directly or indirectly will be discussed throughout.

This analysis just begins to touch the edge of what is an expansive topic. The history of construction remains a somewhat novel subsection of historical building analysis in general, linked perhaps to the dearth of materials available for many projects or to the elusive nature of the subject.¹¹ The lack of substantial material on a particular construction phase might stem from architects and builders' desires to forget the headache that typically accompanies a building project. Or it might reflect the inability of architects and developers to grasp the importance of preserving the details of the construction process for historical and restoration purposes. In the end, the turmoil that frequently accompanies a project, from acquiring the necessary building permits to dealing with labor and community demands to ensuring material availability, seems to melt away once the finished product is realized.

Stein recognized how consciously fleeting one's memory of the construction process often is. Relishing in the finality of a job completed around the time of Hillside Homes' erection, that of Fieldstone School, Stein remarked to his wife Aline, "It is funny, after all the anguish of producing a job of that kind, one forgets it. One comes on it as something discovered, something new...What a multitude of little worries about materials and workmanship - all gone. And there is the shell coming to life. All full of gay and active kids."¹² While "all gone" for Stein soon after the building's completion, it is those

¹¹ Construction History Society of America, accessed September 19, 2013, <http://www.constructionhistorysociety.org>

¹² Letter, Clarence Stein to Aline MacMahon Stein, November 22, 1934, Clarence S. Stein Papers, Box 34, Folder 12.

“multitude of little worries” that the following pages actively work to resurrect and shine a light upon.

CHAPTER ONE

SETTING THE SCENE

The provision of adequate and affordable housing for the working classes, particularly in urban areas, has long been a concern for people of a socially minded disposition. After World War I, this problem became increasingly acute. While the federal government had played an active role in the housing industry during much of the war, establishing the U.S. Housing Corporation and the Emergency Fleet Corporation to construct dwellings for citizens engaged in combat-related industries, it withdrew its support soon after peace was realized in 1918. The withdrawal of public funds, coupled with increased populations in many cities after the war, caused a housing shortage to ensue.¹³ A little over a decade later, the dire economic straits of the 1930s required the federal government to renew its commitment to residential building. This time around, the involvement stemmed as much from a desire to reinvigorate the lagging building industry as it did from an intention to provide quality housing for working class people.¹⁴

Stein wrote and spoke extensively on the “housing problem” during World War I and throughout the 1920s and 1930s. Not content to simply theorize and study the problems, which he did in his role as chairman of the New York State Commission on Housing and Regional Planning, Stein worked hard to put his thoughts to action. In the 1930s, feeling exasperated with the lack of progress and support for his Hillside Homes

¹³ Clarence S. Stein, “The Housing Shortage,” *The Survey* (April 15, 1922), Clarence S. Stein Papers, Box 5, Folder 12; Frederick Law Olmstead, “Lessons From Housing Developments of the United States Housing Corporation,” *Monthly Labor Review* 8 (May 1919): Introduction, accessed September 19, 2013, <http://www.library.cornell.edu/Reps/DOCS/olm19.htm>

¹⁴ Anthony J. Badger, *The New Deal: The Depression Years, 1933-1940* (New York: Farrar, Straus & Giroux, 1989), 238-240.

proposal, Stein confided to his wife, “I want to build those houses, not talk about them.”¹⁵

Over a year later, when the project was still not off the ground, he expressed a similar sentiment to Lewis Mumford, stating “I want to create a few new communities, or at least one before I open my mouth anymore.”¹⁶ While Stein was not able to realize all of the housing schemes he dreamed up, he did succeed in creating a lasting legacy of his vision with Hillside and the other developments that came before and after.

This chapter will focus upon the complex nature of the “housing problem” and the various incarnations it adopted over the course of the 1920s and into the first half of the 1930s. New York City, the site of Hillside Homes and the city with which Stein had the most familiarity, plays a central role in the discussion. The exact nature of the post-war housing crises, its causes, and the solutions put forth by politicians, builders, and designers like Stein are evaluated as are the national occurrences that impacted local residential housing trends. Stein dedicated much of his discourse of the era to the “housing problem,” and his words are presented in order to show how his thoughts translated into ideas later implemented at Hillside and the community developments that preceded it.

The Post-War Housing Problem

As the country adjusted to a peacetime climate after the war, the economy momentarily faltered in reaction to a decrease in production activities, a shortage of

¹⁵ Letter, Stein to Aline McMahon Stein, November 12, 1932, Clarence S. Stein Papers, Box 33, Folder 12.

¹⁶ Letter, Stein to Lewis Mumford, September 5, 1933, Clarence S. Stein Papers, Box 33, Folder 21.

materials, and a return to lower wages.¹⁷ With this short depression came a continuation of the war-imposed civilian building standstill. A “housing emergency,” which went unaddressed during the war, became even direr, particularly for people of modest incomes. Whereas before the war, historian Roy Lubove explains, when speculative builders could turn a steady profit constructing houses for lower-income persons, after the war, rising construction costs made this building type a less lucrative option.¹⁸ Statistics on apartments in New York City gathered during and after the war revealed a sharp drop in vacancies, from 53,541 in 1916 to 3,541 in 1920. Nearly 88 percent of the vacancies in 1920 were in old-law tenements. These small, dark dwellings had minimum standards governing features like natural light and ventilation and were crammed together on narrow lots.¹⁹

Writing on the causes of the post-war housing problem, Stein identified this decrease in availability as linked to a drop in construction activities between 1917 and 1919. He also pointed out that even as construction dropped off, demolition of extant housing continued, causing a relative leveling of the available housing stock. As a city that experienced a population increase of over two million people between 1910 and 1920, New York needed immediate solutions. Those new and returning citizens who came to New York City in 1920, many of them first-generation immigrants, as well as war veterans and civilians who had assisted with the war effort, found a city with 378 less housing units than what had been available at the beginning of 1919. They also

¹⁷ Edward Eyre Hunt, “Unemployment Remedies,” *The New York Times*, May 7, 1922, <http://proquest.com>.

¹⁸ Roy Lubove, *Community Planning in the 1920s: The Contribution of the Regional Planning Association of America* (Pittsburgh: University of Pittsburgh Press, 1964), 19-20.

¹⁹ Clarence S. Stein, “Men, Money, Material Needed to Solve Housing Problem,” *Better Times* 1, no. 8 (October 1920): 20. Clarence S. Stein Papers, Box 5, Folder 7.

encountered steeper rents and overcrowding as people were forced to squeeze into the few residential options that were available. Stein decried the state of much of the housing that was built from 1917 to 1920 and claimed it represented a regression in building standards to the pre-1900 days of railroad tenements, long, narrow apartments of three rooms with windows regulated to the front and back of the units.²⁰ Stein and others felt the only way to successfully deal with the housing problem was to employ legal measures that gave the state government greater control over enforcement, construction, and financing of residential building.²¹

While the federal government was not willing to reinvolve itself in housing construction so soon after the war, some states did pass legislative acts in an attempt to alleviate the problem at a city and state level. One of the more notable acts passed by many states, including New York, was a tax-exemption ordinance. Mary Conyngton, who analyzed the law's impact in New York City a year after its introduction there in February 1921, explained that the thinking behind such an ordinance was to give financial inducements to developers whose inclination was to hold off on building until costs stabilized.²² In an effort to ensure that qualifying projects accommodated people of modest means, the ordinance granted a ten-year grace period for those who built residences costing no more than \$1000 per room and \$5000 total. Conyngton noted that, despite some opposition, the ordinance's passage had immediate positive impacts on residential construction in the city. Between 1920 and 1921, building permits for housing

²⁰ Clarence S. Stein, "The Housing Crises in New York," *The Survey* (September 1, 1920): 661. Clarence S. Stein Papers, Box 5, Folder 5.

²¹ Stein, "Men, Money, Material Needed to Solve Housing Problem."

²² Mary Conyngton, "Effect of the Tax-Exemption Ordinance in New York City on Housing," *Monthly Labor Review* (April 1922): 25. <http://proquest.com>.

rose 32 percent, from 27 percent of total permits issued in 1920 to 59 percent of the total in 1921.²³

The tax exemption had its critics, Stein among them. Stein believed that the lack of restrictions governing the type of builders eligible to receive the exemption resulted in a multitude of low-quality, poorly constructed housing that only met immediate, rather than long-term, needs.²⁴ Criticism aside, the ordinance did succeed in accomplishing its primary goal of reviving the residential construction industry, at least for a time, and its lenient regulations may have played an important part.

As building began again in earnest, lending institutions showed an increased willingness to advance the funds needed to build. Materials scarce during the immediate aftermath of the war because of combat-imposed shortages became more readily available. All of this helped to spur a building boom that was widespread and fast-paced. Historian Richard Plunz notes that, “a volume of new housing” went up in the city during the 1920s “which has never again been equaled, quantitatively or qualitatively.”²⁵ Much of this housing was erected in the outer boroughs, where undeveloped land could be acquired more easily and cheaply than in Manhattan. In these newly emerging residential communities, multi-family apartment units rather than single-family homes predominated.²⁶ An emerging middle class, who desired housing of a higher standard than the ill-lit and cramped walk-up tenements of the lower classes, but who could not

²³ Conyngton, “Effect of the Tax-Exemption Ordinance in New York City on Housing,” 24-26.

²⁴ Stein, *Towards New Towns for America*, 21; Clarence S. Stein, “Build and End the Depression,” *Radio Talk over WINS, Office Copy* (June 7, 1932), 6. Clarence S. Stein Papers, Box 6, Folder 36.

²⁵ Plunz, *A History of Housing in New York City*, 122.

²⁶ *Ibid.*, 123.

afford the luxurious high-rise elevator buildings occupied by the wealthy, helped to spur the trend toward apartment living.

As this shift toward high-rise living occurred, Plunz explains, the definition of the term “apartment” expanded so that it was no longer synonymous with the exclusive homes of the rich but came to embody “any dwelling other than houses.”²⁷ This movement toward apartment-style housing types would not have been possible without advances in elevator technology and subsequent building code legislation, which eliminated the need for an operator and allowed for the use of cheaper component machinery. Such advances, Plunz notes, made it economically feasible to build taller housing options for “a whole class of tenants who had formerly been relegated to walk-up buildings.”²⁸

Landlords further benefited from the ability to charge higher rents for upper level apartments, the desirability of which increased once the drudgery of stair climbing was removed. Over the course of the decade, apartments, whether in the form of vertical towers in Manhattan or lower-lying complexes on the city’s outskirts, became many developers favored housing type. The financiers realized that such buildings were less expensive and more efficient to construct than stand-alone dwellings and could realize high profit margins for their builders.²⁹

²⁷ Plunz, *A History of Housing in New York City*, 123.

²⁸ Ibid., 135-137; *The New York Times*, “Decrease in 1929 in New Housing,” July 6, 1930, <http://proquest.com>.

²⁹ Plunz, *A History of Housing in New York City*, 135-137; *The New York Times*, “Decrease in 1929 in New Housing.”

The Role of Speculative Builders

By 1924 William J. Moore, President of the American Bond and Mortgage Company, argued that, despite the swell of building, “35 percent of the shortage still remains.” He went on to predict, “building activity can go on at 22 to 25 percent above normal for a few years to come before the accumulated housing shortage will be entirely made up.”³⁰ The need for housing on such a large scale created an ideal market for speculative builders, who dominated the residential building industry. Unlike philanthropic organizations and socially-minded designers, who operated on a low- or non-profit business model and relied upon the sometimes-precarious generosity of individuals to finance much of their projects, speculative builders used loans and the profits gained from their previous enterprises to fund their next endeavors. As a result, many of these speculative builders were driven solely by economic gains rather than a concern for quality or for the individuals who would occupy the completed dwellings.

In their efforts to keep pace with housing demands while at the same time ensuring a more than satisfactory return on their investment, many speculative developers made few efforts to provide for those of lower-income. In order to make the endeavor profitable, those that did build for New York’s less affluent residents frequently sacrificed quality for quantity. While Plunz points out that state legislation passed in 1866 and the Tenement House Act of 1901 ensured “it was no longer possible to build a blatantly substandard new dwelling in New York City,”³¹ Stein and other housing advocates living through the early decades of the 20th century found that the monotonous

³⁰ *The New York Times*, “Housing Relief A Matter of Years,” April 6, 1924, <http://proquest.com>.

³¹ Plunz, *A History of Housing in New York City*, 22, 47-49.

residences put up by speculators often left much to be desired. Speculative housing, the advocates believed, often did not provide sufficient ventilation, light, and open green space.³²

The era's residential building trends dismayed many. A housing study conducted in New York City in 1924 found that despite "the enormous quantity" of new construction carried out up to that time, little of it could accommodate the great majority of the population, the two-thirds of people who made \$2500 or less a year.³³ A *New York Times* article written in this same year shared that dire assessment, proclaiming in its heading, "Housing Problem Still Unsolved." The article went on to explain that despite the "vast amount of [residential] building that has been done during the past twelve or fifteen months," rents remained "far beyond the class of people most in need of proper housing." Real estate investors and builders, with their single-minded focus on ensuring an investment return of anywhere between 10 and 20 percent, naturally received the brunt of the blame since their emphasis upon high profit margins made it impossible to build quality homes that were also affordable.³⁴

The methods for construction used by speculative developers, often quick and cheap, caused artificial inflations in wages and material prices across the building industry.³⁵ In their hastiness to turn out houses, speculators often hired tradesman away from public works sites with the promise of higher wages. They also paid premium prices

³² Plunz, *A History of Housing in New York City*, 22, 47-49.

³³ *Housing and Regional Planning Bulletin*, "Housing in New York City," no. 7 (March 1925), 1, Clarence S. Stein Papers, Box 1, Folder 11.

³⁴ *The New York Times*, "Housing Problem Still Unsolved," February 3, 1924, <http://proquest.com>.

³⁵ *The New York Times*, "Banks May Cut Off Speculative Loans in Building Crises," May 24, 1923, <http://proquest.com>; *The New York Times*, "All Building Loans Put Under The Ban," May 25, 1923, <http://proquest.com>.

for materials in order to ensure a constant supply. These practices, a *New York Times* article explained, made it difficult for builders to estimate “what a specified building may cost and when it may be completed.”³⁶

By 1922, just a year after the resumption of construction activities, many lenders expressed fear that speculative builders threatened to upend an industry then just regaining steady footing. Two contentions leveled against speculators by men like J.H. Tregoe, Secretary of the National Association of Credit Men, was that they over-borrowed and overbuilt.³⁷ In an effort to address the situation, many financial institutions threatened to cut off loans for all building activities. Some made good on this warning, for a time reserving loans only for projects already in progress or those judged to be for emergency circumstances.³⁸ A journalist covering the events described how the moneylenders did not want to halt construction completely, but rather hoped that the “curtailment of loans” would help to “distribute the building boom over a longer period of time.”³⁹

The Building Industry

While financial institutions worried over the impacts of an unstable industry, laborers and material providers enjoyed the building windfall. Building industry men were used to contending with ambiguities and haggling over wages and prices. Theirs had always been an unstable industry in which, historian Grace Palladino notes, “a spell of

³⁶ *The New York Times*, “All Building Loans Put Under a Ban.”

³⁷ *The New York Times*, “Speculative Building: Credit Men Fear This Class of Work May Kill Boom,” June 30, 1922, <http://proquest.com>.

³⁸ *The New York Times*, “Banks May Cut Off Speculative Loans in Building Crises.”

³⁹ Ibid.

bad weather, an unexpected rise in prices or interest rates, [or] a business depression all could spell disaster.”⁴⁰ On top of this, the turn of the 20th century was a time of great change for those in the building industry, as the introduction of new methods, materials, and shifts in housing preferences, upended the traditional structure of their work. Standardization of materials meant a higher percentage of production occurred in factories by machines, rather than on the job site by the hands of skilled technicians.

The use of new materials and technologies, like steel construction, rather than masonry or building lumber, linoleum rather than tile, and cement rather than stone, often meant the replacement of one trade for another or allowed contractors to use semi-skilled or unskilled laborers instead of skilled tradesmen. For example, as apartment houses began to gain preference over single-family homes in the latter half of the 1920s, their steel framework required the presence of more structural ironworkers while decreasing the need for large numbers of carpenters.⁴¹ These new methods and technologies also reduced the construction schedule for a particular project and increased the overall efficiency, thereby lessening how much time workers actually spent employed on the site.⁴²

With such advancements and shifts in the industry, many tradesmen placed greater dependence on building trades unions, the primary purpose of which was to protect and advocate for the tradesmen who fell under their purview. The unions were instrumental in securing better wages and improved working conditions for their

⁴⁰ Palladino, *Skilled Hands, Strong Spirits*, 14.

⁴¹ *The New York Times*, “Decrease in 1929 in New Housing.”

⁴² Palladino, *Skilled Hands, Strong Spirits*, 14-15; Carolyn Loeb, *Entrepreneurial Vernacular: Developers’ Subdivisions in the 1920s*, (Baltimore, MD: The John Hopkins University Press, 2001), 43-47.

members, frequently depending upon strikes, or the threat of strikes, to accomplish their aims. Organizing tactics like strikes began to be used with greater frequency during the turn of the 20th century as the ongoing advancements in the building industry threatened the livelihood of once powerful trades. As projects began to favor steel skeleton construction and the use of metal for trim, windows, and doors, jurisdictional disputes frequently arose over which trade had the right to install such novel materials.⁴³

During the 1920s, however, the goods and services of tradesmen and suppliers were in high demand and could be had for a premium price. The speculative market gave organized labor a renewed sense of confidence in their industry with some believing that, while other jobs might become bogged down by wage or jurisdictional disputes, “speculative building will continue indefinitely and...the bricklayers and other mechanics will have plenty of work.”⁴⁴ With the bottoming out of the market in 1929, this predication fell flat, but for the moment much faith remained in the speculators ability to strengthen the building industry and the wallets of material purveyors, tradesmen, and laborers.

War-Time Construction Methods to Meet Post-War Needs

Stein and his colleagues believed that the speculators provided only short-term solutions and criticized them for doing little to strike at the true heart of the housing problem. Stein’s primary critique was of the manner in which “normal real estate” men carried out building. “Where individual lots are sold,” Stein explained, “each man puts up his own building without any thought of its relation to its neighbors.” Speculators,

⁴³ Palladino, *Skilled Hands, Strong Spirits*, 18.

⁴⁴ *The New York Times*, “Banks May Cut Off Speculative Loans in Building Crises.”

“ignorant builders,” Stein declared, were “interested only in immediate sale and profit” and thought little of the long-term impacts of their actions.⁴⁵ In formulating his own vision for the proper way to carry out housing, Stein looked to techniques used during the war years and carried on in Europe and elsewhere thereafter, combining these impressions with his own desire for comprehensive planning that took into account a given community’s present and future needs.

During the war, Stein observed, the federal government adopted large-scale year-round construction methods and used public financing to build factories, worker housing, and other war-related structures in a quick and timely manner. Writing around the time of the armistice in 1918, Stein explained that the war had shown how “the economic strength of the nation depends less on its material resources than upon the physical and moral well-being of its workers.” The provision of proper housing and good working conditions for these laborers was thus a “social responsibility” that should be shouldered by the nation rather than by a few philanthropically minded individuals.⁴⁶ Therefore, Stein argued, the wartime program of a large-scale government-led building initiative should be continued.

Large-scale production, particularly as it applied to housing, was a relatively new idea in the United States but Stein viewed the practice as key for the creation of affordable housing options. Stein described the “fundamental difference” between large-scale planning and speculative building as “large scale planning considers the entire life

⁴⁵ Clarence S. Stein, “Is there a Solution to New York’s Housing Problem?” *Address to the Association of Home Making Teachers of the New York City Schools* (November 17, 1930): 6-7, Clarence S. Stein Papers, Box 6, Folder 24.

⁴⁶ Clarence S. Stein, “Housing and Reconstruction,” *The Journal of the American Institute of Architects* (1918): 469. Clarence S. Stein Papers, Box 5, Folder 10.

of the building, the people who are going to live in it, and the people who are going to operate and manage it” while “planning for quick, speculative sale considers only the quickest method of selling, going out, and building another.”⁴⁷ Stein also advocated for a greater willingness to experiment in the housing field once the war ended.⁴⁸ He declared, “We must try to solve the housing problem after the war in this country, and we must do it in a big way.”⁴⁹

Stein believed the United States should look to parts of Europe, Canada, South America, and Australia as examples of how to successfully use municipal funds to construct housing.⁵⁰ Showing considerable forethought, countries like Great Britain realized that post-war difficulties meant the government needed to continue to play a pivotal role in addressing post-war problems that arose in building and other industries. They therefore instituted public housing programs using large-scale construction methods and proposed the establishment of veteran work relief construction programs.

Stein contended that in the United States, such a “colossal problem” as post-war housing could not be dealt with effectively at a national scale and should instead be distributed amongst individual states. At the state level, Stein argued, the “complicated and diversified desires and habits” of a specific region could be better addressed and a greater degree of experimentation anticipated. Stein also recommended that each state

⁴⁷ Clarence S. Stein, “The Relation of Planning and Building to the Management and Operation of Housing Developments,” for the Public Management Course at New York University (January 27, 1938), Clarence S. Stein Papers, Box 6, Folder 54.

⁴⁸ Ibid., 469-470.

⁴⁹ Ibid., 471.

⁵⁰ Ibid., 472.

should offer relief aid to returning veterans through the provision of construction jobs on public works projects building schools, housing, harbors, and the like.⁵¹

Following the war, many politically-backed committees formed to investigate the “housing emergency,” amongst other issues.⁵² The New York State Commission on Housing and Regional Planning, of which Stein was chairman and others in business and labor organizations were members, was one such initiative. The Commission was the successor of an earlier delegation appointed by Governor Alfred Smith to “frame a permanent housing program” for New York.⁵³ Studying housing conditions in the state as a whole, and New York City in particular, the Commission advocated for changes in the planning, design, construction, and financing of residential units.

In the Commission’s annual report for 1924, it declared that private investors had not met the needs of New York City’s population. Therefore, the Commission recommended, the state should issue public funds for home building, restricting their usage to limited-dividend and cooperative groups interested in passing on savings to potential tenants rather than making great profits for themselves. While such organizations already provided housing for lower-income people, financial constraints greatly hindered their efforts. “Public credit,” the report maintained, would allow these

⁵¹ Stein, “Housing and Reconstruction,” 472.

⁵² *The New York Times*, “To Work Together on Housing Plans,” June 11, 1919, <http://proquest.com>; *The New York Times*, “City Commissions on Housing Urged,” September 29, 1920, <http://proquest.com>.

⁵³ “Report of the Reconstruction Commission of New York State,” March 26, 1920, Clarence S. Stein Papers, Box 1, Folder 11; Edward K. Spann, *Designing Modern America: The Regional Planning Association of America and its Members* (Columbus, Ohio: Ohio State University Press, 1966), 58.

groups to “expand their scope,” and provide much needed housing for a greater proportion of the population.⁵⁴

In his own speeches and writings, Stein advocated for the use of public credit to “decentralize population through the creation of garden cities.” He envisioned such garden cities as self-sustaining enclaves with ample space for agriculture to nourish the residents, industry to employ them, and social service spaces to educate and enliven them.⁵⁵ Ideally, inhabitants would cooperatively own the new cities and be the direct beneficiaries of any increases in the land value. Stein also believed the cooperative method could work well for the production and acquisition of building materials and for the construction of houses. Until government control insured greater oversight in the production and distribution of such aspects of residential construction, citizens, particularly workers, needed to take matters into their own hands. Stein argued that the speculative market created a less than ideal working environment for laborers.

The laborers, Stein concluded,

have lost interest in their work. They feel that their efforts enrich a few profiteers instead of adding to the well-being of themselves or the community...The building trades workers will not do their best to promote the interest of some speculative contractors or landlord who will afterward squeeze them without mercy. The responsibility for decent houses must be placed on the workers by giving them the right and means of building for themselves.⁵⁶

Stein’s assertion of the causes of laborers dissatisfaction reflected his belief that such a market created inhospitable living and working conditions for its members and

⁵⁴ *Housing and Regional Planning Bulletin*, “Housing in New York City,” 3.

⁵⁵ Stein, “The Housing Crises in New York.”

⁵⁶ Stein, “Housing Crises in New York,” 660.

that greater government oversight and increased citizen control represented the best way to effectively solve the problem.⁵⁷

Building Model Communities: Sunnyside and Radburn

While some of the housing and construction solutions put forth by Stein and like-minded thinkers in the post-war era did gain relevance during the 1920s, few of the ideas achieved widespread acceptance by those whose acknowledgement was most needed, namely politicians, business leaders, organized labor, and society at large. Until government backed residential construction became a necessity during the Depression, the provision of affordable housing remained in the hands of a concentrated group of concerned citizens. With the assistance of architects Henry Wright and Frederick Ackerman, Stein designed two such developments during the 1920s, Sunnyside Gardens, in the Borough of Queens, and Radburn, in northern New Jersey about fifteen miles from the George Washington Bridge at the north end of Manhattan. The City Housing Corporation, a limited dividend organization, formed to oversee the financing and construction of Sunnyside and Radburn. To pay for the communities, the corporation enlisted philanthropic backers willing to provide funds in exchange for a six percent return on their investment.

At Sunnyside, Stein implemented many of the solutions advanced in his writings of the time. A community development adapted for the city's grid, Stein and the City Housing Corporation considered Sunnyside an experiment, an indication of how housing could be made affordable for upper working class and lower middle class people. The

⁵⁷ Stein, "Housing Crises in New York," 660.

project went up in just five years, between 1924 and 1928, and provided housing for 1,202 families.⁵⁸ Stein and Wright designed the 55.82-acre site with buildings covering only 28 percent of the site. Open green space took up much of the remaining land.⁵⁹ Brick, a durable, simple, and relatively affordable material, predominated. The speedy schedule would not have been possible without the adoption of large-scale standardized construction methods, a year-round construction schedule, and cooperation from the building trades.⁶⁰ Good leadership and a healthy flow of private financing played an important role as well.

Stein and Wright designed the development to be standardized but not monotonous with seven housing types employed, including “one, -two, -and three-family houses, two cooperative apartments buildings, three rental apartment” buildings, as well as garages, commercial buildings, and community spaces.⁶¹ Somewhat contrary to modern-day perceptions of mass-produced housing subdivisions, Stein argued that large-scale construction provided consistency while avoiding dullness. [Figure 1.1.] Speaking on the topic of well-conceived housing developments in 1931, Stein claimed, “The surest way to obtain harmony in a group of houses is to design and build them as a single project.”⁶² Limiting materials and having a small group of expert designers employed on such a project could achieve, Stein believed, quality living for people of modest means.

⁵⁸ Rosalind Tough, “Production Costs of Urban Land in Sunnyside, Long Island,” *The Journal of Land & Public Utility Economics* 8, no.1 (Feb, 1932): 43-54, <http://jstor.org>; Stein, *Towards New Towns for America*, 21.

⁵⁹ Tough, “Building Costs and Total Costs at Sunnyside, L.I.,” *The Journal of Land & Public Utility Economics* 8, no.2 (May, 1932): 166, <http://jstor.org>.

⁶⁰ Stein, *Towards New Towns for America*, 22-30.

⁶¹ Tough, “Building Costs and Total Costs at Sunnyside, L.I.,” 167.

⁶² *New York Herald Tribune*, “Building Homes as Unit Project Gives Harmony,” Sept. 4, 1930, Clarence S. Stein Papers, Box 5, Folder 27.



Figure 1.1. Buildings flank one of the first courtyards completed at the Sunnyside development. The apartment building and row of single and double family houses shown here face a fenced area that all residents' could use. Clarence S. Stein Papers, Box 4, Folder 52. Division of Rare and Manuscript Collections. Cornell University, Ithaca, NY.

Reflecting on Sunnyside nearly three decades after its completion, Stein described how the initial intention was to make the development a community for lower-income workers. He and Wright aimed for “economical spaciousness...as a result of judicious group planning” in their design. Stein emphasized that they embraced simplification at Sunnyside so that it would not become a “middle-class suburb.” To an extent, the designers achieved this goal. Many of Sunnyside’s first residents did come from lower-income backgrounds, with building tradesmen, mechanics, chauffeurs, salesmen, teachers, factory workers, cooks, nurses, and waiters amongst the early residents. Higher-income wage earners like businessmen and professionals also had a strong presence, however, so that while most of the first inhabitants made between \$2,100 and \$3,000 per year, many made upwards of \$3,000 and few made less than \$2,100.⁶³

The variety of options provided at Sunnyside meant it possible for the development to house people of varied income levels, from building tradesmen who had participated in the development’s construction to well-regarded professionals like architecture critic Lewis Mumford.⁶⁴ Mumford was one of the development’s first residents and lived there for 11 years, moving after the first few years to an attached house at the westernmost end of the development.⁶⁵ Ultimately, Sunnyside was not able to be a model for truly affordable housing for the city’s lowest income residents, but it

⁶³ City Housing Corporation, “Second Annual Report” (May 1926) 2, 13; City Housing Corporation, “Third Annual Report” (April 23, 1927) 10, Sunnyside Gardens Annual Reports, New York Public Library, New York, N.Y.

⁶⁴ Richard T. Ely, “The City Housing Corporation and ‘Sunnyside,’” *The Journal of Land & Public Utility Economics* 2, no.2 (April, 1926): 175-77, <http://jstor.org>.

⁶⁵ Lewis Mumford, *Sketches from Life: The Autobiography of Lewis Mumford, The Early Years* (New York: The Dial Press, 1982), 411-415.

did provide an indication of how to successfully integrate mixed-income housing into the urban environment.

For the City Housing Corporation's subsequent endeavor, Radburn, Stein set out to create a more fully realized version of a garden city than what could be achieved in the city proper. Erected on roughly two square miles of land in the Borough of Fairlawn, New Jersey the project's developers employed many of the same construction techniques used at Sunnyside and even introduced new ideas, such as the establishment of an on-site material manufacturer and supplier called the Radburn Brick & Supply Company, established to ensure efficiency and speed in the construction schedule.⁶⁶ As at Sunnyside, outdoor space and community gathering spots acted as defining features. Housing types varied from individual dwellings of five to eight rooms to apartment units of two to five rooms.

With the advantage of a site not constrained by the city's grid, Stein and Wright's plan for Radburn, which was heralded as a "town for the motor age," separated motor vehicle traffic from pedestrians through the use of pathways and underpasses.⁶⁷ [Figure 1.2.] Even though the automobile was celebrated and Manhattan was relatively accessible by road or train, the initial intention for Radburn was that it would be a self-sustaining enclave with industry located close by so that its mixed-income inhabitants could walk to work from their homes.

⁶⁶ Stein, *Towards New Towns for America*, 39.

⁶⁷ *New Jersey Builder*, "Radburn: A Town for the Motor Age," November 1965, Clarence S. Stein Papers, Box 1, Folder 17.



Palmer Shannon

RADBURN, NEW JERSEY
CLARENCE S. STEIN AND HENRY WRIGHT
ARCHITECTS AND TOWN PLANNERS

Figure 1.2. Plan of Radburn, NJ. *Architectural Forum*, March 1932.
Clarence S. Stein Papers, Box 5, Folder 32.

During the conceptual phase, Stein explained when looking back on the project in the 1950s, Radburn's planners believed the community was ideally situated for industry, being close to "the great silk center" of Patterson, New Jersey and nearby an existing rail line and proposed highway. It turned out, however, that industry in the area was on a "downward trend" and those industrial workers that were employed nearby could not afford the prices of Radburn homes.⁶⁸ The desire for an integrated industrial node was not the only part of the plan that failed. The development itself was never completed as drawn out in the original plans. This was largely due to unfortunate timing. Construction at Radburn began in 1928, just a year before the stock market crash. The City Housing Corporation was unable to sustain itself during this economic crisis, leaving Radburn only partially finished.⁶⁹

As a result, Radburn became a well-planned suburb for middle-class residents, many of whom Stein described as "'white collar' commuters from New York City."⁷⁰ Stein placed the blame for Radburn's inability to meet the needs of lower-income people only "partially" upon "the quality of planning and building and the high standard of community facilities and organization."⁷¹ Rather, Stein identified a lack of government aid as the critical issue hindering a model community like Radburn from providing a viable solution to the housing problem. Government assistance, in the form of "subsidies, low rate loans, and insured mortgages" did not come later until the federal government set aside money for the construction of Hillside and comparable developments.⁷²

⁶⁸ Stein, *Towards New Towns for America*, 39-41.

⁶⁹ Ibid., 57-59.

⁷⁰ Ibid., 41.

⁷¹ Ibid., 39.

⁷² Ibid., 41.

The Housing Problem Persists After the Crash

Despite the multitude of buildings erected during the Roaring Twenties and the efforts of organizations like the City Housing Corporation to provide quality affordable dwellings, inadequate housing for many remained a pressing issue into the Depression-laden thirties. Evaluating distressed housing conditions on a national scale in 1930, Dr. Edith Elmer Wood, a prominent housing reformer, found that substandard buildings accounted for over 36 percent of all housing stock in the United States, with non-farm buildings amounting to a staggering 6 million. The definition of substandard housing applied to residences that lacked clean water, private indoor bathroom facilities, adequate sewer connections, and contained twice as many people as rooms.⁷³ Looking at the conditions in 1930 as they applied to New York City specifically, Stein determined that approximately four million New Yorkers resided in congested, unfavorable conditions. Many of these four million people still lived in old-law tenements with unsafe conditions and inadequate amounts of light and air, to say nothing of actual green space.⁷⁴

In Stein's view, those who had the advantage of newer housing options were often no better off. Stein found post-war housing to be monotonous, poorly built, and lacking the essential features for modern, comfortable living. Describing the appearance of some of the dwellings rapidly erected in Queens after World War I, Stein characterized them as "miles and miles of massed wooden structures...ugly houses crowded in long rows like

⁷³ William McCloy, "Uncle Sam as Landlord: How the Housing Program is Actually Working Out." *North American Newspaper Alliance* (1936): 5, John Nolen Papers, Collection #2903, Division of Rare and Manuscript Collections, Cornell University Library, Ithaca, NY, Folder "U.S. Public Works Administration, Housing Division, 1933-1936."

⁷⁴ Stein, "Is There A Solution to New York's Housing Problem?" 1-3; *The Home News*, "The Old Law Tenements," July 17, 1933, Scrapbook: Hillside Homes: May 29, 1933 -. Nathan Straus, Jr. Papers, Franklin D. Roosevelt Library, Hyde Park, New York.

soldiers on parade. Except for a tiny grass plot in front of these rows of shoddy wooden structures they are surrounded by masses of concrete.”⁷⁵ [Figure 1.3.] Stein concluded with decisiveness, “These are the future slums of New York.”⁷⁶ In his criticism, Stein did not take into account the fact that these residences, though “ugly” and not built of high quality materials, were often the only affordable option for many families otherwise crowded together into even more contemptible tenements. Stein, as a designer and architect, had the ability to worry over details of material and form. Those for whom he purported to design for did not typically have that luxury.

Journalist Joseph P. Day, who characterized the 1920s boom as a “wild orgy of building,” agreed with Stein’s assessment of the poor quality of much of the post-World War I housing stock. In 1931 Day noted, “many of these homes [put up during the boom years] today are crumbling on their foundations and are mute evidence of the slap-stick methods and cheap material used in their hurried construction.”⁷⁷ In addition to inferior quality, housing advocates maintained that the style of building after the war, predominately on a small-scale, individualistic basis, had resulted in a stunted industry. Stein insisted that while “mass production” was a feature of the 1920s building boom, there was nevertheless a lack of “technical advantages of large scale planning or construction” during that time, which greatly hampered the effectiveness and economics of building.⁷⁸

⁷⁵ Stein, “Is There A Solution to New York’s Housing Problem?” 3-4.

⁷⁶ Ibid., 3-4.

⁷⁷ Joseph P. Day, “Queens Building Shows Increase,” *The New York Times*, May 3, 1931, <http://www.proquest.com>.

⁷⁸ Clarence S. Stein, “Housing and the Depression.”



Figure 1.3. Monotonous residences in Long Island City, New York. Rows of houses that represented the types of dwellings Stein spoke out against in the 1920s, ridiculing them for their poor quality and mediocrity. These particular homes were built close to the Sunnyside Gardens site. Clarence S. Stein Papers, Box 2, Folder 52.

Roland Wank, chief architect of the Tennessee Valley Authority, a government corporation established during the Great Depression, concurred with Stein's assessment. Wank argued that "revolutionary improvements" to the building industry would only occur once "mass production puts materials of the twentieth century—steel, concrete, aluminum, glass, cork, rubber, resin compositions, etc.—closer within our reach." Until this occurred, the industry was "confined to the same materials as our forefathers used, and they have already made a pretty thorough job of exploring all the possibilities of lumber, brick, stone and mortar."⁷⁹ Unlike Wank, Stein was not opposed to the idea of using traditional materials to build his developments, but he did believe that improvements were nevertheless needed to allow for the construction of truly low-cost quality housing.

In 1930, Stein declared, "housing has been practically unaffected by the great decade of industrial standardization and mechanization" and that, rather than advance, construction standards were lower in the post-war period.⁸⁰ While the factory-made elements that then went into most housing units, specifically the "mechanical equipment of the kitchen, bathroom and furnace room," utilized new methods to create a better product, "the shell itself, which is put together by craftsmen on the job, shows practically no technical progress." In addition, Stein argued that most homes lacked proper insulation and did not address fire-safety concerns adequately.

⁷⁹ John T. Moutoux, "The TVA Builds a Town" *The New Republic* (January 31, 1934): 331, quoted in Plunz's, *A History of Housing in New York City*, 180.

⁸⁰ Clarence S. Stein, "The President's Housing Conference—A Challenging Opportunity," Reprinted from *The American City*, (November and December 1930): 1, Clarence S. Stein Papers, Box 5, Folder 28.

Rather than building for quality and durability, Stein maintained, “an astoundingly large portion of the houses have been jerry-built by ignorant or irresponsible builders” whose developments were arranged in a “haphazard, individualistic speculative manner” that did little to meet present-day needs.⁸¹ Many, including Stein, continued to believe that the only way to effectively solve the housing problem was to completely overhaul how houses were financed, planned, and built.

The Building Industry After the Crash

Coinciding with the housing problem of the 1930s was, of course, the Great Depression. The financial distress spread across all industries, including the building industry, which at the time was the nation’s second largest.⁸² While construction activities began to decline in the last few years of the 1920s as supply outpaced demand, dramatic shifts did not occur until directly before the fall of the stock market in October 1929.⁸³ In 1930, George A. Platt, secretary and treasurer of the New York State League of Savings and Loan Associations, described how “the wholesale construction of buildings practically ceased several months before the stock market crash.” He placed the blame for much of the economic downturn upon the “speculative orgy” of residential building.⁸⁴ Stein agreed with Platt that “unrestrictive real estate development” was directly tied to the “bankruptcy that is faced by our larger cities.”⁸⁵ In this way, the speculative

⁸¹ Stein, “The President’s Housing Conference—A Challenging Opportunity,” 1.

⁸² Stein, “Build and End the Depression.”

⁸³ United States Bureau of the Census, *Historical Statistics of the United States*, 618-619, 627.

⁸⁴ *The New York Times*, “Savings and Loans Firms in State Show Gains Despite Decline in Construction Operations,” Nov. 30, 1930, <http://proquest.com>.

⁸⁵ Stein, “Housing and the Depression,” 1.

environment of the 1920s not only had negative civic consequences, which most concerned Stein, but widespread economic implications as well.

During the decade-long depression, 1933 was a particularly trying time for housing and labor. In this year the unemployment rate breached 25 percent, causing unemployment for one-fourth of all Americans with civilian occupations.⁸⁶ As construction slowed, the building industry too felt the pinch. Whereas during the boom years of the 1920s, when a *New York Times* article declared, “organized labor is confident that speculative building will continue indefinitely,”⁸⁷ between 1929 and 1933, the construction of new housing units dropped by 81.7 percent and with this downturn many jobs vanished.⁸⁸ Historian Palladino explains how, by 1933, “seven out of ten building tradesmen were out of work, and the rest saw hours drop, average wages fall (by 15 percent), and annual earnings cut in half.”⁸⁹ Asserting slightly higher figures, Nathan Straus, Jr. who lived through the Depression and played a significant role in the development of Hillside Homes, stated that in 1933, during the “depths of the depression...75 percent of the workers in the building trades were idle.”⁹⁰ Regardless of these slight discrepancies, both Palladino and Straus’s figures illustrate just how dire the employment situation was for many men engaged in the construction trades during the Great Depression.

⁸⁶ United States Bureau of the Census, *Historical Statistics of the United States*, 135.

⁸⁷ *The New York Times*, “Banks May Cut Off Speculative Loans in Building Crises.”

⁸⁸ United States. *Historical Statistics of the United States: Colonial Times to 1970*.

⁸⁹ Palladino, *Skilled Hands, Strong Spirits*, 82-83.

⁹⁰ Nathan Straus, Jr. Interviewed by O. Bombard. *The Reminiscences of Nathan Straus*. Oral History Research Office, The New York Times Oral History Program, Columbia University (1950): 114.

In her research, Palladino found that the unemployment situation impacted many previously well-represented building trades unions, such as the “Iron Workers, Painters, Plumbers, Plasterers, and Sheet Metal Workers,” all of whom “lost at least half their membership.” Others lost even more.⁹¹ Union representatives, seeing their industry falter, agitated for better representation on government jobs and more of them. They also called for increased standards when it came to wages, hours, and production.⁹² Housing construction and overall employment numbers did pick up in successive years. The rise had close links to government initiatives introduced shortly after the crash when the nation’s political leaders realized the laissez-faire mentality previously adopted could not fix the multitude of problems facing the country. In this way, out of the ashes of the financial collapse, Stein’s post-World War I vision of a strong governmental presence in the building industry began to take shape.

Solutions For the Residential Building Industry’s Revival

During the first few years of the Depression, with commissions arriving only intermittently, Stein had considerable time on his hands to mule over the current state of the housing industry and to devise possible solutions. For Stein, the Depression, while certainly “a curse,” could have positive results for city building in that architects now had the “time to study the past and develop a better means of producing [a] more adequate human environment.”⁹³ In the 1930s, despite the trying times, Stein and others worked to

⁹¹ Palladino, *Skilled Hands, Strong Spirits*, 83.

⁹² Ibid., 82-83; *The New York Times*, “City Asked to Rush Building Projects To Aid Unemployed,” March 7, 1930, <http://proquest.com>.

⁹³ Stein, “Housing and the Depression,” 2.

introduce solutions that they hoped would alleviate the dual problems of inadequate housing and vast unemployment.⁹⁴

By this time, it was no easy task to find people or organizations willing to finance and oversee developments like those for which Stein and other housing reformers advocated. Although materials costs were at an all time low and available labor was increasingly abundant, building activities had slowed considerably with few people financially able to build or purchase new structures.⁹⁵ The generosity of wealthy, socially conscious benefactors could no longer be counted upon, as it had at Sunnyside Gardens and a number of other affordable housing projects of the previous decade. As Stein noted in 1930, while admirable, “philanthropy is too limited in its resources to contribute greatly to the solution of this colossal [housing] problem.”⁹⁶

Stein and other civic minded architects like Robert D. Kohn, Ralph Walker, and Stephen Francis Voorhees viewed materials manufacturers and others in the trades as pivotal for the revival of building specifically and the economy more generally. As Stein explained to Aline in January 1932, he and the other men thought the building industry should have direct involvement in jumpstarting housing on a large scale.⁹⁷ Stein’s idea involved the creation of “limited dividend corporations under the state law” by members of the building industry “and what money it can’t get from lending institutions [should

⁹⁴ Stein, “Build and End the Depression;” Letter, Stein to Aline MacMahon Stein, January 19, 1932. Clarence S. Stein Papers, Box 33, Folder 7.

⁹⁵ *The New York Times*, “Savings and Loans Firms in State Show Gains Despite Decline in Construction Operations,” November 30, 1930, <http://proquest.com>.

⁹⁶ Stein, “Is there a Solution to New York’s Housing Problem?” 5.

⁹⁷ Letter, Stein to Aline MacMahon Stein, January 5, 1932. Clarence S. Stein Papers, Box 33, Folder 7.

be] put in the form of materials and work.”⁹⁸ Stein thought, “It may go in spite of sounding a bit wild.”⁹⁹ Rather than simply supply the materials and labor for housing jobs that others developed and financed, it appears that Stein’s vision was for industry men take on all aspects of the work themselves.¹⁰⁰ While this scheme in its purest form never came to fruition, Stein had a chance to further explore some of these ideas at Hillside Homes.

Stein identified two main causes he believed had led to “past failures” in the residential building industry. First, Stein argued, “housing is carried on as speculation rather than investment” and second, “housing is looked upon as a purely private affair rather than a public function.”¹⁰¹ Architect Harry Allen Jacobs concurred with the first point, explaining how, by 1930, affordable housing was the “one form of building that has not been overdone.”¹⁰² As noted above, speculators rarely invested in this housing type because they stood to gain little from their initial investment due to “high building costs and expensive land.”¹⁰³

In the early 1930s, adapting his post-war viewpoint to the current economic situation, Stein insisted that the use of large-scale construction methods and greater governmental involvement could have far reaching implications, beyond simply

⁹⁸ Stein, Letter to Aline, January 19, 1932, Clarence S. Stein Papers, Box 33, Folder 7.

⁹⁹ Ibid.

¹⁰⁰ Clarence S. Stein; Kermit C. Parsons, editor, *Writings of Clarence S. Stein: Architect of the Planned Community* (Baltimore, Maryland: John Hopkins University Press, 1998), 177. While the scheme never achieved full realization, Stein did have the chance to explore some aspects of this novel idea with the large-scale model communities he devised in 1933 and 1934 for a series of proposed housing developments on abandoned airfield sites.

¹⁰¹ Stein, “Build and End the Depression,” 3-6.

¹⁰² *The New York Times*, “Need for Housing at Moderate Price,” November 8, 1931, <http://proquest.com>.

¹⁰³ Ibid.

furnishing residences for low-income persons.¹⁰⁴ Not only would such building provide employment for many men directly involved in the building industry, he maintained, it would also “stimulate many other industries” such as raw and finished materials producers, public utility companies, and railroads. If carried out, Stein argued, large housing projects like those he envisioned could “bring an end to the present emergency.”¹⁰⁵

Having observed the “building orgy” of the 1920s, when New York granted tax exemptions to “all who would build,” Stein advised that public subsidies should be limited to organizations not driven solely by money, identifying non-profits and limited dividend corporations as ideal candidates. To avoid the speculative mess of the previous decade, Stein said, lending institutions, whether public or private, should not distribute loans without careful consideration given to “the quality of construction, the ability and integrity of the builder; the financial ability of the purchasers to meet all costs of future upkeep, future assessments and taxes; or the future character of the neighborhood as affecting the value of the house.”¹⁰⁶ He argued that lending, as with housing in general, should be carried out in a deliberate and orderly manner that gave thoughtful consideration to both present day circumstances and future projections.

Architect Henry S. Churchill voiced a similar opinion in 1933 when he emphasized that government subsidies were needed for social welfare projects. Reflecting a viewpoint that remains relevant today in light of more recent fiscal crises, Churchill believed it was a grave mistake to “divert money to rescuing banks and

¹⁰⁴ Stein, “Is there a Solution to New York’s Housing Problem?” 8; Stein, *Towards New Towns for America*, 41, 71-72; Stein, “Build and End the Depression,” 3.

¹⁰⁵ Stein, “Build and End the Depression,” 3.

¹⁰⁶ *Ibid.*, 6.

speculators from the consequences of their own folly” and that financial assistance should instead be funneled towards affordable housing projects.¹⁰⁷

Stein continued to advocate for large-scale construction methods and to express his opinion that public assistance should only be distributed to those who built on a large-scale rather than on a one-home-at-a-time basis. His reasoning was that such small-scale building could not be accomplished economically for people of lower incomes and only resulted in much unnecessary waste. Instead, “housing operations...should be carried out on a large-scale by organizations which can afford to employ the best technical skill, that can buy materials in sufficient quantities and employ a sufficiently large force of workers to secure every possible economy.”¹⁰⁸ It was time to be rid of the “antiquated methods” that had heretofore defined the building industry and concentrate instead upon building to “meet the needs of the future.”¹⁰⁹ Through his writings and speeches, Stein laid the groundwork for many of the policies and procedures that would soon be explored at Hillside Homes. He also garnered support for his cause, which eventually had champions in both the labor and political realms.

The Government Re-Invests in Home Building

At a time when any action seemed hopeful, labor leaders and politicians shared many of Stein’s sentiments about the need to revive the residential building industry. In the immediate aftermath of the crash, building as an impetus for employment was a call made by Senator Robert F. Wagner of New York, who later oversaw the establishment of

¹⁰⁷ *New York Herald Tribune*, “Money Rates Slum Solution, Architect Says,” June 4, 1933, Scrapbook, Hillside Homes, May 29, 1933-, Nathan Straus Jr. Papers

¹⁰⁸ Stein, “Is There a Solution to New York’s Housing Problem?” 10.

¹⁰⁹ Stein, “Housing and the Depression,” 1.

a National Labor Relations Act, and leaders of the American Federation of Labor.¹¹⁰ The American Federation of Labor and other labor organizations called upon New York City to “embark on a large-scale program of slum clearance and housing construction.”¹¹¹

Sharing Stein’s belief in the necessity for government intervention, a petition these organizations distributed declared that the current “unemployment crises of serious proportions...demands the immediate and energetic attention of the public authorities.”¹¹² Bureaucrats such as former president Calvin Coolidge, current president Herbert Hoover, and New York State Governor Herbert L. Lehman, all spoke in favor of reviving the residential building industry as a stimulus for improving the economy as a whole.¹¹³

In December 1931, President Hoover organized a Conference on Home Building and Home Ownership, bringing together 1,000 leaders in related fields to address the problems then affecting residential construction and home ownership. Financing was identified as the “chief problem” with “health, morals, education, and efficiency” also addressed. Hoover’s chief desire was that the conference might result in the “development of sound policy and [that it] might inspire better voluntary organizations to cope with the problem.” Like many of his contemporaries, Hoover shared the belief that a revitalization of these related industries could have a significant impact on the “current

¹¹⁰ *The New York Times*, “Wagner Projects Employment Aid,” November 22, 1929, <http://proquest.com>; *The New York Times*, “City Asked to Rush Building Projects to Aid Unemployed”; Badger, *The New Deal*, 51.

¹¹¹ *The New York Times*, “City Asked to Rush Building Projects to Aid Unemployed.”

¹¹² *Ibid.*

¹¹³ *The New York Times*, “Commends Coolidge on Home Building,” July 27, 1930, <http://proquest.com>; *The New York Times*, “Lehman Urges Public to Aid Housing Plan,” November 9, 1934, <http://proquest.com>; *The New York Times*, “Hoover Calls 1,000 On Home Building,” September 16, 1931, <http://proquest.com>.

unemployment and economic situation.”¹¹⁴ Hoover also oversaw the creation of a Committee on Large Scale Housing, which Stein praised for advancing the “new technique” of mass production.¹¹⁵

Unlike Stein, leaders of the American Federation of Labor, and Governor Lehman, however, President Hoover thought the private sector should be in charge of dealing directly with the renewal of the residential building industry and other sectors of the economy as well.¹¹⁶ As he emphasized when discussing the Conference on Home Building and Home Ownership a few months before the event took place, Hoover declared, “It is obviously not our purpose to set up the Federal Government in the building of homes.”¹¹⁷ In late 1931, Hoover was not yet ready to take the dramatic step toward increased government involvement that came just a short time later with the establishment of the Reconstruction Housing Corporation (RFC), in January 1932, and the New Deal initiatives of his successor, Franklin Delano Roosevelt.

The RFC’s primary purpose was to alleviate conditions through the distribution of loans.¹¹⁸ According to a *New York World Herald* article, the “theory” behind the RFC’s building loan program “was to give employment and help coax the cycle of building and buying into operation again.”¹¹⁹ When this program’s methods proved insufficient, new

¹¹⁴ *The New York Times*, “Hoover Calls 1,000 On Home Building.”

¹¹⁵ Clarence S. Stein, “For Com. On Large Scale Operation, Pres. Hoover Comm. CSS,” October 6, 1931, 1. Clarence S. Stein Papers, Box 11, Folder 24.

¹¹⁶ Badger, *The New Deal*, 42-49.

¹¹⁷ *The New York Times*, “Hoover Calls 1,000 On Home Building.”

¹¹⁸ U.S. Government, “Do You Know What They Mean: Alphabeticals of the New Deal and What They Stand For.” John Nolen Papers, Box 68.

¹¹⁹ *World Telegraph* “The Bronx Housing,” November 21, 1932; Scrapbook: Hillside Homes September 25 1932 - March 12 1933; Nathan Straus, Jr. Papers.

legislation passed as a part of President Roosevelt's New Deal worked to introduce a comprehensive national building program with the government as a central player.¹²⁰

Two pivotal pieces of legislation that related most directly to the revival of the residential building industry were the National Industrial Recovery Act, enacted in 1933, and the National Housing Act, approved in 1934. With a primary focus on fixing the unemployment problem and addressing the housing needs of lower-income people, these acts granted protections and assistance to those who implemented, financed, constructed, and purchased homes.¹²¹ The National Industrial Recovery Act gave increased protections to America's laborers, enforcing minimum wage, hour, and price standards and collective bargaining rights, while the National Housing Act provided insurance to lending agencies so that home builders and purchasers might benefit from more favorable credit conditions.¹²²

The National Industrial Recovery Act also allowed for the establishment of the Public Works Administration (PWA), which was initially allocated \$3.3 million to construct projects executed in the interest of the public good.¹²³ One public interest undertaking the PWA oversaw was a program of urban re-housing. The PWA granted state and city authorities the power to choose which projects were worthy of funding. In

¹²⁰ Bret Conover Garwood, "Clarence S. Stein and Hillside Homes, Precedents for Planning Low Income Housing and Designing Community Architecture in New York City," (Master's thesis, Cornell University, 1998), 53-54.

¹²¹ Badger, *The New Deal*, 238-242; McCloy, "Uncle Sam as Landlord," 5.

¹²² Badger, *The New Deal*, 74, 239; Palladino, *Skilled Hands, Strong Spirits*, 83-84.

¹²³ U.S. Government, "Do You Know What They Mean: Alphabeticals of the New Deal and What They Stand For."

the case of New York City, the decision-making rested with the State Housing Board and the city administration.¹²⁴

By 1935, the PWA oversaw 57 projects nationally with an estimated expenditure of \$208 million. These consisted of either slum clearance or vacant land developments. Fifty of the PWA projects had the direct involvement of the federal government while seven handed off oversight duties to limited dividend organizations. Hillside Homes, one of the first PWA projects in New York City, reflected the latter method.¹²⁵ By undertaking residential construction on a large scale, PWA projects like that of Hillside Homes succeeded in employing 103,000 men between 1934 and 1935, with roughly half employed on site and the other half in off-site locations handling material production needs. The intense use of manpower ensured that 76 percent of the total costs went into the pockets of the employed men.¹²⁶

Employment numbers and building activity did begin a slow but steady climb after 1934, proving that legislative acts like those enacted for the industrial and residential building sectors could be effective stimulus measures. The growth in jobs and building also indicated that increased government involvement might have its advantages. However, neither the National Industrial Recovery Act nor the National Housing Act successfully realized all of their initial goals or completely satisfied their intended audiences. For example, while the National Industrial Recovery Act elevated the status of trade unions and provided much needed jobs, the implementation of some of its

¹²⁴ *The New York Times*, "Speedy Start Urged in Building Projects," June 22, 1933, <http://proquest.com>

¹²⁵ Straus, *The Reminiscences of Nathan Straus*, 49-50, 53. Hillside's developers initially tried to secure an RFC loan for the project but after that effort failed they applied and received a PWA loan.

¹²⁶ McCloy, "Uncle Sam as Landlord," 4.

measures set off a flurry of discontent amongst union members. The unions main concern lay in the failure of the Act's administrators to adequately consider jurisdiction, labor standards, and wage rates previously achieved by the tradesmen when proceeding with programs like those overseen by the PWA.¹²⁷ The unions embraced many aspects of government intervention, so long as the associated measures did not penetrate too deeply into their established methods of accomplishing their work.

Conclusion

By the early 1930s, many of the ideas pushed for by housing advocates like Stein in the post-war period were well on their way to reality. With government support, new housing, some of it novel in overall form and plan, emerged in towns and cities across the United States. By 1935, New York City had three PWA projects in process simultaneously. One of these was Hillside Homes. Pieces of federal legislation enacted in the early 1930s, along with a local provision introduced in 1927 that granted tax exemption for affordable housing developments, laid a framework that set in motion such public works housing projects.¹²⁸ Requiring government oversight for such aspects of residential building as the overall design, the people employed, and the materials utilized ensured a higher level of compliance with building and labor standards at Hillside and comparable developments than could typically be imposed when projects were privately funded.

¹²⁷ Palladino, *Skilled Hands, Strong Spirits*, 88-93.

¹²⁸ Straus, *The Reminiscences of Nathan Straus*, 48-49. Garwood, "Clarence S. Stein and Hillside Homes," 54; *The New York Times*, "War On Slums is Waged With New Weapons," July 12, 1927, <http://proquest.com>.

Before Hillside became a reality, however, much had to be done in the way of planning and design to ensure the development met the needs and pocketbooks of its desired population. Securing adequate financing, from both the government and private sources, and garnering political support proved of equal importance when Stein and his collaborators set out to build Hillside. Although legislation now existed that allowed for the types of government-sponsored housing projects Stein envisioned, the path to produce a project like Hillside was one strewn with many difficulties and missteps.

CHAPTER TWO

PLANNING AND DESIGN OF HILLSIDE HOMES

Hillside Homes represented the culmination of many of Stein's avant-garde ideas developed in the extreme circumstances of the Depression. Hillside first materialized as an idea by January 1931.¹²⁹ It was a vision of Stein's at a time when he had no influential partners or attainable funding schemes to help the project get off the drawing board. Nascent federal and state legislation that provided public assistance for qualifying projects made it considerably easier to get Hillside and its unorthodox design moving forward; a small but influential contingent of supporters also helped.¹³⁰ With the design, construction, and financing of Hillside, Stein was able to realize many, but not all, of the aims contained in his writings and speeches.

This chapter will focus upon the planning and design stages of Hillside's development. The process by which Stein acquired financial and professional support for his idea will be of primary interest. While it was Stein's vision that first brought the project into existence, Hillside would not have been realized without the assistance of Frank Vitolo, Andrew Eken, and Nathan Straus, Jr. As they set out to acquire adequate financing and the necessary approvals of the government, the building industry, and the local community, all four men's formidable experiences and established networks proved

¹²⁹ In a letter to Aline on January 25, 1931, Stein mentions evaluating affordable housing costs that made use of a municipal lending scheme but only hints that a new large-scale development may be in his future a full year later when he alludes to possibility that "something may break in the way of large scale housing." Letter, Stein to Aline McMahon Stein, January 25, 1931, Clarence S. Stein Papers, Box 33, Folder 1; Letter, Stein to Aline McMahon Stein, January 27, 1932, Clarence S. Stein Papers, Box 33, Folder 7.

¹³⁰ Letter, Stein to Aline McMahon Stein, January 14, 1931, Clarence S. Stein Papers, Box 33, Folder 1.

crucial. Stein, Vitolo, Eken and Straus depended greatly upon their well-honed professional backgrounds throughout the course of the project, particularly during times of controversy. Each of these men brought different strengths to the table that, when combined, ensured that Hillside was many steps closer to realization. This chapter concludes with an analysis of the project's design aims during the planning stage so as to set the scene for what actually developed after ground was broken on the site.

The Idea Takes Shape

Stein's initial vision for Hillside borrowed much from his earlier developments in the New York City area, Sunnyside Gardens and Radburn, both overseen by the City Housing Corporation and discussed above, and Phipps Garden Apartments, a residential complex in Queens financed by the Phipps Foundation. Stein's early visions of Hillside also benefited greatly from his former design partner, Henry Wright's, study of hillside housing developments. In 1932, Wright and a number of collaborators, not including Stein, published an article on "Hillside Group Housing" in *Architectural Record*. The article praised this type of housing plan for its economy and resourcefulness. The hillside housing design took advantage of the rolling topography of a site to build units stepped into the site's contours. While initial costs for site development were often higher than constructing on a flat parcel, the article argued, such housing types made more "efficient use of land area" and provided above average amounts of sunlight and air.¹³¹ With an emphasis upon efficiency, economy, and ventilation, principles Stein advocated for in his

¹³¹ Henry Wright, "Hillside Group Housing," *Architectural Record* 72, no. 4 (October 1932): 3, Clarence S. Stein Papers, Box 2, Folder 12.

own writings, it is unsurprising that he chose to employ such a design for his newest housing development.

Stein conceived of Hillside as a “complete neighborhood” planned with all “the requirements of a good community” that was “large enough so that there will be community interests; and which can afford to have nurseries and whatever else is needed by the community.”¹³² Because of Stein’s advocacy for ample green space and the allowance of sufficient light and air into all apartments, he determined that a “site of eighteen to twenty-two acres was required.” Such a sizable plot would enable the development to “house some 5,000 people or around 1,200 or 1,300 families,” and still have enough space outside for a playground and large open courts, where residents could relax or be active, between the individual buildings. From the beginning the intention was to build Hillside in New York City. Although, as at Sunnyside and Phipps, Manhattan itself was rejected in favor of the outer boroughs so that inexpensive land at “one dollar or less per square foot” might be acquired. There was also a desire to locate the development adjacent to an elementary school, thereby allowing school age children living at Hillside to easily reach their classes by foot.¹³³

As he set about planning Hillside, Stein resurrected design elements and construction methods used previously. From Sunnyside Gardens, Stein incorporated the principle of a comprehensive building program that took advantage of standardization and a continuous schedule; from Radburn he integrated the idea of a superblock with streets regulated to the periphery or otherwise separated from the pedestrian; and from

¹³² Stein, “The Relation of Planning and Building to the Management and Operation of Housing Developments,” 152.

¹³³ Ibid.

Phipps Garden Apartments he reformulated the ideal way in which to arrange interior spaces and to organize units around central courts.¹³⁴ The themes of quality and durability, which played a central role in Stein's previous work, continued at Hillside.

Phipps was of particular importance during Hillside's planning stage. Although erected on a smaller scale, Stein explained that Phipps provided "the basis of the first studies." Looking to Phipps, "the object was to secure the same advantages with cross-ventilation, surrounding garden courts, but at a third less rental."¹³⁵ At Phipps, Stein had the advantage of a seemingly bottomless budget, allowing him to incorporate materials and design ideas not allowed for in his nearby developments, where economy reigned supreme. Even with Phipps's higher budget, Stein continued to employ similar design methodologies in the overall layout as used previously, with tweaks made to accommodate for the particulars of the site and Stein's own efforts at continual refinement.

For example, while Stein utilized Sunnyside's I-shaped units at Phipps, he widened the buildings depth-wise to increase room sizes, increasing the square footage from 203 square feet per room to 219 square feet.¹³⁶ However, Stein remained unsatisfied with one aspect of the apartment design found at both Sunnyside and Phipps. This was the fact that, in the four-room apartments, which consisted of two bedrooms, a living room, kitchen, and bathroom, the living room acted as an access point to all other rooms.

¹³⁴ Parsons, *The Writings of Clarence S. Stein*, 176; Stein, *Towards New Towns for America*, 31, 93, 96; Letter, Stein to Aline McMahon Stein, April 10, 1932, Clarence S. Stein Papers, Box 33, Folder 8; Stein, "The Relation of Planning and Building to the Operation and Management of Housing Developments," 152.

¹³⁵ Stein, *Towards New Towns for America*, 93.

¹³⁶ Stein, *Towards New Towns for America*, 89; Clarence S. Stein, "Notes for Evolution of 4 Room Apartment," 1926-1935, Clarence S. Stein Papers, Box 2, Folder 4.

As the predominate apartment type for all of the architect's nearby developments, Stein worked to reformulate the four-room apartment's layout at Hillside to allow for increased efficiency and ease of use.

At Hillside, Stein made necessary modifications to the plans employed at his earlier developments in order to fit with this new project's specific program and the distinct typography of its site. He manipulated the site, building, and apartment layouts from earlier jobs in an effort to create an even better, more livable, community. While Stein employed the I-unit plan used previously, favored for its "economy of space and cost as well as increased light and ventilation," he also added in the T-unit plan, a combination of three I-units.

This new type of T-unit plan, Stein argued, resulted in "less waste and cost."¹³⁷ [Figure 2.1.] Stein also succeeded in further refining the 4-room apartment type, resulting in larger room sizes, at 223 square feet per room, and allowing for the inclusion of a small foyer so that tenants did not have to go through the living room to access the other spaces in their homes.¹³⁸ [Figure 2.2.] Many of these design refinements would not have been possible without the assistance of a team of qualified experts who worked with Stein to realize his endeavor.

¹³⁷ Stein, *Towards New Towns for America*, 96-97.

¹³⁸ *Ibid.*, 96; Stein, "Notes for Evolution of 4 Room Apartment."

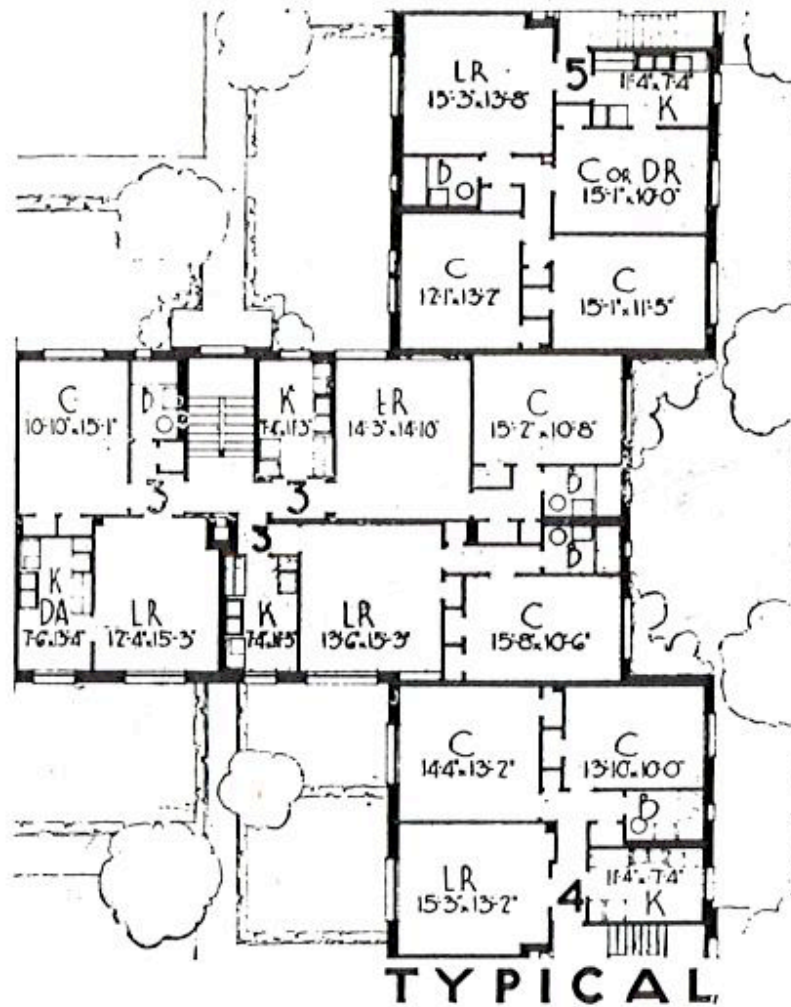


Figure 2.1. Typical apartments in I units arranged as a T. At Hillside, Stein combined three I-units into a T to cut down on costs and building waste. Clarence Stein, *Towards New Towns for America*, 95.

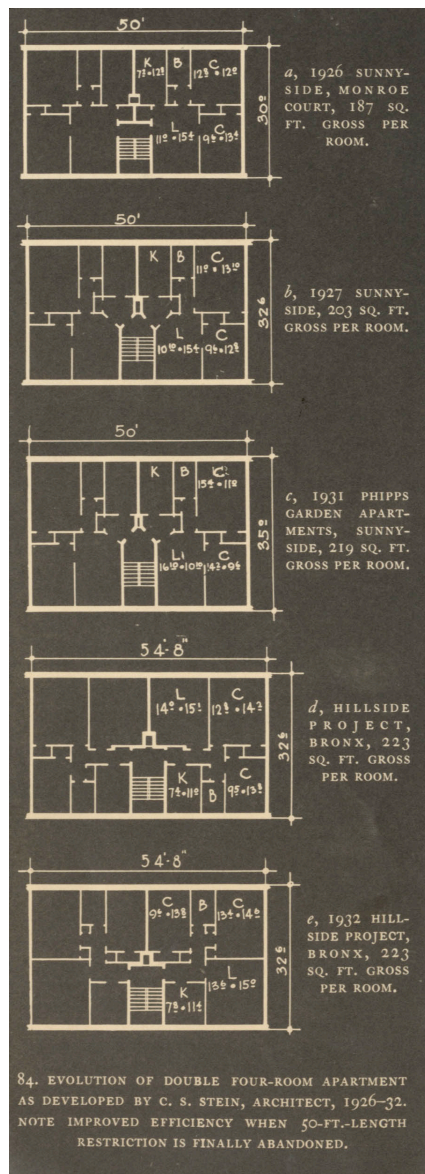


Figure 2.2. Evolution of the 4-Room Apartment. This sequence shows the continual refinement of the four-room apartment plan, beginning with the first plan for Sunnyside in the mid-1920s. By the time the final Hillside plan developed, the living room was no longer the main connector in the apartment and each of the rooms increased slightly in size from what they had been at Sunnyside. Clarence S. Stein Papers, Box 2, Folder 4.

Gathering a Team of Experts

In the beginning, Stein had no built-in network of savvy businessmen to advocate for his cause, as had been the case on earlier projects. This changed by April of 1932, when Stein enlisted the help of Frank Vitolo, a fellow architect, and Andrew Eken, a high-profile builder. Both of these collaborators brought a number of skills to the table that ensured Hillside's eventual success. They, along with Nathan Straus, Jr., a former member of the New York State Senate who became involved in the project in late July 1932, helped push for government financing, devise cost estimates, and find a suitable site on which to build Hillside. Other men also aided in the project along the way, including Henry Wright, Stein's architectural design partner at Sunnyside and Radburn.¹³⁹ The involvement of Vitolo, Eken, and Straus, however, proved most pivotal for Hillside's eventual realization.

Frank Vitolo

Frank Vitolo, a close personal friend as well as colleague of Stein's, worked with him on a number of projects, including Phipps Garden Apartments and a proposed addition to Radburn. Like Stein, Vitolo was an associate with the architectural firm Kohn and Butler for many years.¹⁴⁰ His adeptness with numbers made him particularly useful when studying the financial feasibility of Hillside and other developments. At Hillside official documents identify Vitolo as the project's superintendent of construction but his role was much more far-reaching. Throughout the Hillside saga, Vitolo acted as Stein's trusted accomplice, accompanying him on surveys of potential sites. Once construction

¹³⁹ Letter, Stein to Aline McMahon Stein, June 30, 1932, Clarence S. Stein Papers, Box 33, Folder 9.

¹⁴⁰ *The New York Times*, "Frank E. Vitolo: Was With Architectural Firm Here for Twenty Years," December 18, 1938. <http://proquest.com>.

actually began, Vitolo was at the site regularly. When not physically on the site, he was out paying visits to various governmental offices in New York and Washington, D.C. acquiring approvals.¹⁴¹

While tension sometimes pervaded Stein's interactions with Eken and Straus, particularly as the project progressed, Vitolo remained a dependable ally.¹⁴² Stein expressed his deep respect and admiration for his friend when reflecting on Hillside's success in the 1950s. Stein described Vitolo as a man "who formed the essential link between architect and builder...[he] was an architect who understood the ways and the nature of the various construction trades as thoroughly as a builder did."¹⁴³ Vitolo also had a sophisticated understanding of the "complicated legal framework of building and housing laws, more thoroughly even than the building department officials."¹⁴⁴ Stein valued Vitolo's ability to get the necessary approvals for the "unorthodox plans" employed at Hillside.¹⁴⁵ Unfortunately, Vitolo passed away in 1938, just three years after Hillside's completion.¹⁴⁶

Andrew J. Eken

As chief builder, Andrew J. Eken too played a pivotal role in Hillside's development. [Figure 2.3.] Eken was instrumental in finding a site for the project and

¹⁴¹ Letters, Stein to Aline McMahon Stein, 1932-1935, Clarence S. Stein Papers, Boxes 33-35; Hillside Homes File, New York City Buildings Department, Bronx Borough Office, New York City, New York.

¹⁴² Letters, Stein to Aline McMahon Stein, 1932-1935, Clarence S. Stein Papers, Boxes 33-35.

¹⁴³ Stein, *Towards New Towns for America*, 100.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

¹⁴⁶ *The New York Times*, "Frank E. Vitolo: Was With Architectural Firm Here for Twenty Years."

using his influence to garner support. He also helped to devise cost estimates and advocate for the project's desirability to lawmakers in New York and Washington, D.C.¹⁴⁷ Eken hailed from the building firm of Starrett Brothers & Eken, which made him a storehouse of knowledge on the efficient running of large-scale, fast-paced building projects. As vice-president of the firm, he oversaw construction of the Empire State Building just a few years before Hillside. The steel framework for the towering Empire State Building, standing 102 stories high and 1248 feet tall, went up in 1929 in just five months. Careful preliminary planning took place before the building's erection, resulting in 15 discarded plans but ensuring that construction occurred in an orderly and efficient manner.¹⁴⁸ Eken's experience with large-scale efforts like the Empire State Building served him well when construction began at Hillside, a comparatively modest venture.

Stein's own feelings toward Eken shifted like a pendulum during Hillside's planning and construction phases. During the early months of construction, Stein confided to Aline that he felt he had to be constantly on his guard to ensure Eken was not "putting one over on me and the job."¹⁴⁹ And towards the conclusion, Stein expressed frustration with Eken's attempts to portray himself as the sole designer of Hillside.¹⁵⁰

[Figure 2.4.]

¹⁴⁷ Letters, Stein to Aline McMahon Stein, 1932-1935, Clarence S. Stein Papers, Boxes 33-35; Straus, *The Reminiscences of Nathan Straus*, 48-54.

¹⁴⁸ Andrew J. Eken. "The Ultimate in Skyscrapers?" *Scientific American* 144, no. 6 (May 1931) <http://www.nature.com>.

¹⁴⁹ Letter, Stein to Aline McMahon Stein, July 26, 1934, Clarence S. Stein Papers, Box 34, Folder 10

¹⁵⁰ Letter, Stein to Aline McMahon Stein, May, 21, 1935, Clarence S. Stein Papers, Box 35, Folder 2.



Figure 2.3. Andrew J. Eken.
Empire State, Inc. "Empire State: A History, May 1, 1931."

Years after the project concluded, however, it appears that Stein managed to forget these past difficulties and focus instead upon his satisfaction with how Starrett Brothers & Eken's handled the job. Writing in the 1950s, Stein described how Starrett Brothers & Eken "had the great job completely and superbly organized. One trade methodically followed another from footings to roof – and then moved on to the next block."¹⁵¹ Straus, who had a particular fondness for Eken, went even further by describing Eken as "a man of indefatigable energy and dogged persistence," going on to elaborate, "he is probably the best builder in the United States."¹⁵² In this statement, contained in an oral history interview Straus conducted for Colombia University, Straus's praise for Eken came at the expense of devaluing the contributions made by others on a project like Hillside.

Later on in the interview, Straus continued to bestow large amounts of credit to Eken and himself for Hillside's realization while underemphasizing Stein and Vitolo's contributions to the development. In his reminiscences of the project, Straus confined Stein's role to architect and designer while he identified Eken as the housing theorist and himself and Eken as the men who initiated and fought for the project's funding schemes. Straus overlooked Vitolo's involvement completely. When comparing Straus' recollections with Stein's play-by-play account of the project, as detailed in his letters to Aline, a picture emerges that implies there was more fluidity to each of the men's roles than Straus was willing to acknowledge.¹⁵³

¹⁵¹ Stein, *Towards New Towns for America*, 100.

¹⁵² Straus, *The Reminiscences of Nathan Straus*, 54.

¹⁵³ Ibid.; Letters, Stein to Aline McMahon Stein, 1932-1935, Clarence S. Stein Papers, Boxes 33-35.

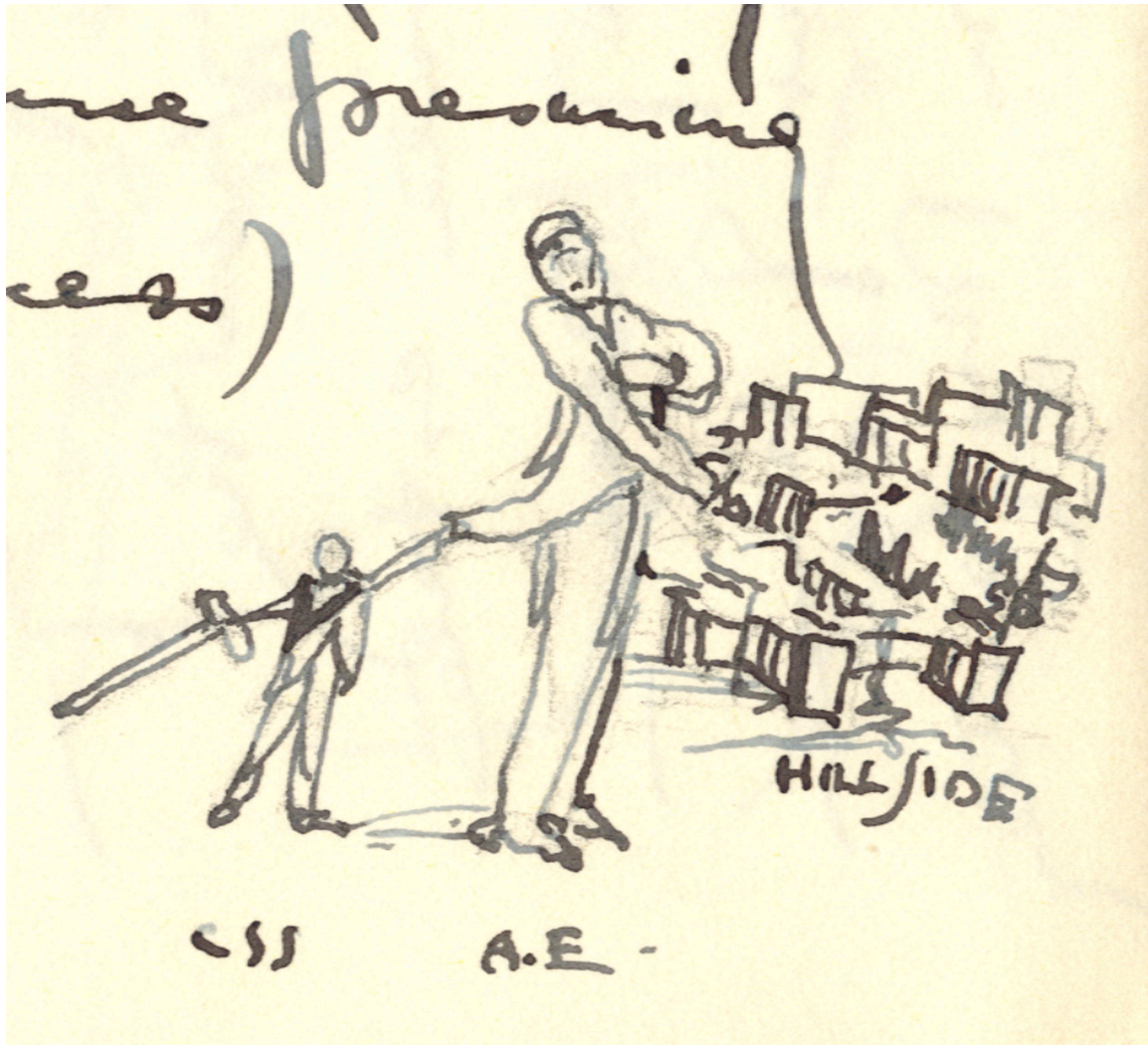


Figure 2.4. Cartoon drawn by Stein. In this cartoon, Stein portrays Eken as a towering figure lording over Hillside. Stein, on the other hand, is shown as comparatively smaller but ready to fight, sword in hand, against Eken's attempts to steal the limelight. Letter, Stein to Aline McMahon Stein, May 21, 1935, Clarence S. Stein Papers, Box 35, Folder 3.

Eken clearly played an important role not only as Hillside's builder but also as one of the project's main estimators and securer of funds and it is unlikely the development would have been built without Eken's assistance. Eken helped to enlist the support of C.M. Wooley, President of the American Radiator Company and Standard Sanitary Company, as an early investor in the project.¹⁵⁴ As head of a large building materials supplier, Mr. Wooley represented the type of industry heavyweight that Stein believed could play a key role in the revival of the country's construction activities. Eken also helped Stein devise a plan that incorporated a host of modern conveniences into Hillside at an affordable sum. The struggling economy made it possible to incorporate these conveniences, including electricity, into a cost-conscious project like Hillside.

Stein later insisted that the "interchange of ideas, experience, and factual data" which took place between architect and builder during the two year pre-construction period "saved time, money, and minimized changes—as well as expediting the work throughout."¹⁵⁵ "Hillside Homes was his [Eken's] first venture in large-scale housing," Straus later explained, "and he poured into it all of his tremendous energy and his determination to make it a landmark in the development of housing project construction in the United States."¹⁵⁶ Eken prevailed in this attempt, Straus believed, and thereafter his firm pursued a number of other housing projects, following in the wake of their "pioneering work" at Hillside.¹⁵⁷

¹⁵⁴ Letter, Stein to Aline McMahon Stein, April 9, 12, 13 and July 13, Clarence S. Stein Papers, Box 33, Folder 8 & Folder 10; Straus, *The Reminiscences of Nathan Straus*, 49.

¹⁵⁵ Clarence S. Stein, "Hillside Homes," *American Architect* (February 1936): 2. Clarence S. Stein Papers, Box 5, Folder 41.

¹⁵⁶ Straus, *The Reminiscences of Nathan Straus*, 54.

¹⁵⁷ Ibid.

Nathan Straus, Jr.

Like Eken, Straus's work at Hillside Homes incited his own life-long interest in housing issues. Straus's association with Hillside began after he offered to sell Eken and Stein a large undeveloped piece of land in the Bronx for the inexpensive price of \$1.00 a square foot.¹⁵⁸ While the site was located further from Manhattan than Stein preferred, the affordability and the sloping topography of the land made Straus' tract the best fit for the development.¹⁵⁹

A well-connected individual, Straus himself was also an ideal candidate to become involved in the Hillside project. [Figure 2.5.] While Straus had little experience in the realm of housing before Hillside, his established political ties and recognition amongst the elite of New York as a wealthy philanthropist gave the project added prestige and publicity. Although there were a few instances when his involvement nearly hampered progress on the development, which will be discussed in more detail below, on the whole his support helped to move the project forward.

¹⁵⁸ Straus, *The Reminiscences of Nathan Straus*, 48. In Straus's oral interview, he states that he first learned of the Hillside project in the spring of 1933 but, as indicated by Stein's letters to Aline and by newspaper articles of the period, Straus's involvement with the project actually began in 1932; Letters, Stein to Aline McMahon Stein, 1932, Clarence S. Stein Papers, Box 33; Scrapbooks, Nathan Straus, Jr. Papers. Straus later lowered the price to \$.80 a square foot. *New York World Telegraph*, "The President's Address," May 8, 1933, Scrapbook, "Hillside Homes, March 17, 1933-May 24, 1933," Nathan Straus, Jr. Papers.

¹⁵⁹ Letters, Stein to Aline McMahon Stein, June 30 and July 12, 1932, Clarence S. Stein Papers, Box 33, Folder 9 & 10.



Figure 2.5. Nathan Straus, Jr.
New York Times, "Straus Quits Post as NRA Officer,"
September 13, 1934.

Having served for six years on the New York State Senate in the early 1920s and as the director of the New York State division of the National Recovery Administration (NRA) in the early 1930s, Straus had close ties to political figures like New York City Mayors John P. O'Brien and Fiorello Henry LaGuardia as well as President Roosevelt. He was also a strong supporter of labor rights. During his time as a state senator and later in his bid to become head of the United States Housing Authority, Straus spent time cultivating relationships with organized labor groups and business leaders both locally and nationally. In the early 1920s, Straus became associated with Senator Wagner, the staunch labor advocate mentioned above in Chapter One.

Straus's affiliation with Wagner and his concern for the plight of the state's laboring classes induced him to push for minimum wage and maximum hours' legislation as a senator.¹⁶⁰ Straus exhibited a great deal of forethought in his support for governmental oversight on these types of labor issues as it was not until the 1930s, when the government commanded more control over industries like construction, that such labor standards acquired fuller realization. In his own role as an NRA division head, Straus enforced and regulated labor standards and codes.¹⁶¹ While there were instances during Hillside's construction when organized labor voiced discontent, it is likely that the involvement of labor sympathizers like Straus helped to smooth over tensions so that construction continued at a steady pace.

Straus's ties to figures like Mayor O'Brien ensured that the concept of Hillside did not flounder when criticism arose from local real estate interests over the project's

¹⁶⁰ Straus, *The Reminiscences of Nathan Straus*, 67.

¹⁶¹ *The New York Times*, "Straus Quits Post as an NRA Officer," September 13, 1934, <http://proquest.com>.

receipt of government assistance.¹⁶² His involvement also likely helped in the project's receipt of endorsement from high profile figures like former New York Governor Alfred E. Smith, Bronx Borough President James J. Lyons, Senator Wagner, and President Roosevelt.¹⁶³ Straus acted as the spokesman throughout much of the project, with his words and name most often quoted in news coverage during the planning and construction phases. One newspaper article even erroneously described him as, "the originator of the plan to establish the model homes" of Hillside, a mistake which undoubtedly annoyed Stein.¹⁶⁴ While certainly not Hillside's originator, Straus was devoted to the project. In September of 1934, he even resigned from the NRA so that he could devote more time to Hillside.¹⁶⁵ As detailed in his resignation letter to President Roosevelt, he felt, "The responsibility for the success or failure of the project...will rest with me, and the next few months will be critical."¹⁶⁶

Straus' involvement at Hillside Homes allowed him to cultivate a relationship with housing issues and led him to devote a considerable portion of his later career to the subject. Near the end of Hillside's construction, Straus traveled to Europe to study housing programs in England, France, Switzerland, and elsewhere. After his return, he published a report on his findings, in which he encouraged the United States to adhere

¹⁶² Straus, *The Reminiscences of Nathan Straus*, 51-53.

¹⁶³ "See Revival of Housing Project," Scrapbook, "Hillside Homes, March 17, 1933-May 24, 1933." Nathan Straus, Jr. Papers.

¹⁶⁴ *The Home News*, "LaGuardia and Lyons Praise Hillside Housing Project at Ground-Breaking," April 20, 1934, Scrapbook, "March 30, 1933-July 6, 1934." Nathan Straus, Jr. Papers.

¹⁶⁵ Straus, *The Reminiscences of Nathan Straus*, 88B.

¹⁶⁶ *The New York Times*, "Straus Quits Post as an NRA Officer."

more closely to European models.¹⁶⁷ Straus also became part of the City Housing Authority board and later served as the director of the United States Housing Authority.¹⁶⁸ But before Straus could move on to these other positions, there was Hillside and the winding road that led to its eventual realization.

Planning and Design Schedule

By the summer of 1932, with a strong team of diverse supporters assembled, Stein and the others embarked on a plan to synthesize and clearly define the design aims for Hillside. They formed the Hillside Housing Corporation, a limited dividend company, to oversee the construction and management of the development and to facilitate the pursuit of government supported financing.¹⁶⁹ While the men did not realize it at the time, opposition from a number of different directions meant that two years elapsed before construction began, allowing for a longer than expected planning period.

The delay was closely linked to local discontent with the proposed funding schemes, which early on consisted of a state tax exemption and a loan from the Recovery Finance Corporation (RFC). Another point of contention was the desire to construct the development on vacant rather than slum-cleared land. In addition, Stein's association with Robert D. Kohn, recently elected as Director of the National Housing Board, raised

¹⁶⁷ Straus, *The Reminiscences of Nathan Straus*, 82; *New York City Herald Tribune*, "Straus to Study Housing Plans Abroad for City," July 19, 1935, Scrapbook, "July 7, 1934-October 9, 1934." Nathan Straus, Jr. Papers.

¹⁶⁸ Straus, *The Reminiscences of Nathan Straus*, 84, 88-89.

¹⁶⁹ The Corporation did not officially form until June 1933 but newspaper articles preceding this date discussed the project's sponsors under the title of the Hillside Housing Corporation, *The New York Times*, "R.F.C. Defers Loan on Hillside Homes," February 11, 1933, <http://proquest.com>; Hillside Housing Development, "Application to the Federal Emergency Administration of Public Works," 18, June 30, 1933, Clarence S. Stein Papers, Box 46.

some eyebrows when the Hillside Housing Corporation requested federal funding.¹⁷⁰ As Straus later recounted, “There were a hundred different questions, to which no one knew the answers, involved in the design, financing, and construction of this wholly novel type of housing project. Moreover, in addition to practical difficulties, there was the bitter organized opposition of most of the real estate interests and practically all of the small speculative builders in the Bronx.”¹⁷¹

The positive impact of such a long design interval is that it allowed Stein, Eken, Vitolo, and the various draftsmen involved to devote large amounts of time to the study of costs and design. During this period, and continuing into the early stages of construction, the men developed, and subsequently discarded, a total of forty-five plans.¹⁷² [Figure 2.6.] With the assistance of Vitolo and Eken, Stein scrutinized the layout of the apartments and continually rearranged them in order to find the organization that ensured maximum efficiency, light, and ventilation.¹⁷³ The team even went so far as to construct a mock four-room apartment unit so as to more thoroughly and realistically study how “maximum convenience” might be achieved “at minimum cost.”¹⁷⁴ Out of such careful study the men created an apartment in which all rooms flowed from a central entrance passage and where the rooms themselves were larger and better proportioned than what could be found at Stein’s earlier developments.¹⁷⁵

¹⁷⁰ Letter, Stein to Aline McMahon Stein, July 27, 1933, Clarence S. Stein Papers, Box 34, Folder 3.

¹⁷¹ Straus, *The Reminiscences of Nathan Straus*, 49.

¹⁷² J.P. Lohman, “Speaking of Real Estate,” *New York City American*, May 22, 1935, Scrapbook, “July 7, 1934-October 9, 1934.” Nathan Straus, Jr. Papers.

¹⁷³ Clarence S. Stein, “Evolution of Double Four-Room Apartment As Developed By C.S. Stein, Architect.” Clarence S. Stein Papers, Box 2, Folder 4.

¹⁷⁴ Stein, “Hillside Homes,” *American Architect*, 2.

¹⁷⁵ Stein, *Towards New Towns for America*, 96.

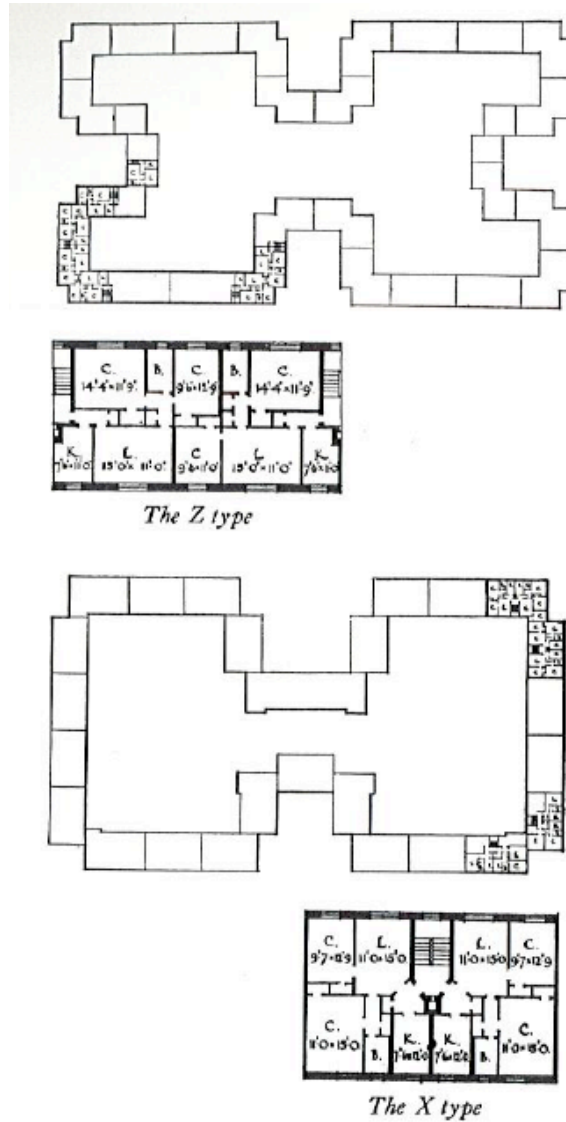


Figure 2.6. Two of the plans developed, and then rejected, for Hillside. These drawings show X and Z type plans. Such layouts would have resulted in smaller rooms than what was eventually built. Stein, *Towards New Towns for America*, 94.

Despite a simmering antagonism directed at the project, in November of 1932, Hillside's construction seemed imminent. By this time, the RFC granted the project a \$3,957,000 loan and the State Housing Board approved a partial tax exemption on the buildings.¹⁷⁶ One of the Hillside Housing Corporation's main arguments to justify receipt of such financial incentives was that the development would provide much needed jobs and set a standard for quality affordable housing that subsequent projects might copy.

After learning that their application for the RFC loan had been approved, Straus, Eken, and Stein released a joint press statement in which they declared:

The granting of the loan of 66 2-3 per cent of the cost of the Hillside Housing Development by the Reconstruction Finance Corporation marks, we hope and believe, a milestone in the development of better housing for people of limited means. Government encouragement of such work will provide immediate employment to 1,000 men in both skilled and unskilled classifications to build the Hillside Housing Development. We sincerely believe that similar action on the part of the Reconstruction Finance Corporation will provide the greatest possible stimulus to employment as well as creating a lasting monument to the desire for better housing throughout the country.¹⁷⁷

If excavation work began immediately, as was the intention, the project could be completed in two years and provide housing for 1200 families.¹⁷⁸ Unfortunately the swell of opposition only grew more vocal as 1932 gave way to 1933. A large faction of landlords and property owners in the Bronx and elsewhere delivered a number of charges against Hillside.

¹⁷⁶ *World Telegram*, "The Bronx Housing," November 2, 1932; *New York Sun* "Bronx Project to Start Soon," Nov. 2, 1932; Scrapbook, "Hillside Homes: September 25, 1932-March 12, 1933." Nathan Straus, Jr. Papers.

¹⁷⁷ *New York Herald Tribune*, "Bronx Housing Project to Give Jobs to 1,000," November 2, 1932; Scrapbook, "Hillside Homes: September 25, 1932-March 12, 1933," Nathan Straus, Jr. Papers.

¹⁷⁸ *Ibid.*

Among the critics list of grievances:

- Hillside would compete directly with extant apartment buildings in the area, many of which had high vacancy rates;
- Government assistance should only be given to projects on cleared slum land;
- The proposed exemption would raise taxes on nearby property owners;
- And, aiming a direct attack at one of the project backers, the project was a ploy by Straus to sell off undesirable property at an excessive cost.¹⁷⁹

Not all real estate men saw Hillside as a detriment. Some, like J. Clarence Davies, a real estate investor in the Bronx, came around to the idea of the project after realizing the potential it held for employment relief and neighborhood betterment. Joseph Levin, a realtor and President of the Tri-borough Business Bureau, also supported the project noting, “The working man in the Bronx needs less expensive apartments which are comfortable and modern.”¹⁸⁰ These sentiments appeared to be the minority, however, as many continued to voice their dissatisfaction with the injustice, unfairness, and superfluosness of using government financing for such purposes.¹⁸¹

Early on, organized labor also took issue with the development, insisting that the project should not be allowed to move forward out of fears that non-union men might be employed on the job. The other main contention was that the experimental techniques

¹⁷⁹ *The Home News*, “Landlords Hold Protest Meeting as Bronx Housing Plan Wins New Aid,” November 16, 1933; *New York Sun*, “Realty Board Opposes R.F.C.,” December 10, 1932. Scrapbook, “Hillside Homes: September 25, 1932-March 12, 1933,” Nathan Straus, Jr. Papers.

¹⁸⁰ *Daily News*, “The Inquiring Photographer,” November 21, 1932, Scrapbook, “Hillside Homes: September 25, 1932-March 12, 1933,” Nathan Straus, Jr. Papers.

¹⁸¹ *Ibid.*; *North Side News*, “Another Hearings is Held On Bronx Housing Before Mayor,” Scrapbook: “Hillside Homes March 17, 1933-May 24 1933, Nathan Straus, Jr. Papers.

advocated for by the designers might leave out certain trades.¹⁸² Unlike the majority of real estate men, however, a large conglomerate of union men later offered to retract their opposition if certain conditions were met. At this time, unemployment affected 90 percent of tradesmen in the Bronx. Agnes Craig, an advocate for tenant's rights in the city, explained that the Bronx experienced practically no building after the 1929 crash and there were then few indications of any construction occurring in the near future.¹⁸³ The union men realized that a large project like Hillside offered the possibility of work and wages at a time of few job prospects.

Exhibiting a great deal of solidarity, the tradesmen's representatives, the Bronx Board of Agents of the Building Trades, emphasized that they could not support a project that did not offer employment for all types of skilled laborers. As one of their spokesperson's explained, "We do not believe in standing in the way of progress, but we object to the Government's money being used for experimental purposes. The purpose of the Reconstruction Finance Corp. was to create work, not to increase unemployment. If the sponsors of the Hillside project will go on record to use the regular mode of construction so that no trades will be eliminated, organized labor will be only too glad to co-operate with all parties interested in the Hillside construction so that it may go ahead immediately."¹⁸⁴

¹⁸² *World Telegram*, "Union Agents See Labor Turn to Communists," March 2, 1933; *Bronx Home News*, "Building Trades Group Asks Action on Housing Projects to Help Starving Workers," March 5, 1933; Scrapbook, "Hillside Homes: September 25, 1932-March 12, 1933," Nathan Straus, Jr. Papers.

¹⁸³ *The Home News*, "Agnes Craig Calls for Revival of Tenants' Council to Help Jobless Combat Evictions," January 13, 1933, Scrapbook, "Hillside Homes: September 25, 1932-March 12, 1933," Nathan Straus, Jr. Papers.

¹⁸⁴ *Bronx Home News*, "Building Trades Group Asks Action on Housing Projects to Help Starving Workers," Nathan Straus, Jr. Papers.

The opposition from organized labor and from real estate interests required Hillside's leaders to change their vision for the development or risk its premature demise. By February 1933, after deciding to defer their earlier approval of the project, the RFC predicted that Hillside would "die a natural death."¹⁸⁵ In March 1933, taking the offensive, Straus publically admonished city officials for their apathetic stance, insisting that further delays threatened the project. Speaking before the city's Board of Estimate, who at that time held the authority to decide on Hillside's tax-exempt status, Straus adopted a pessimistic tone, noting that "Prices of building materials are skyrocketing, and unless this project is approved very soon, we may be forced to drop it."¹⁸⁶ Indicating that the development now had the support of organized labor, at this same meeting Straus explained how he was being "deluged" with requests from labor organizations inquiring as to when the project would begin.¹⁸⁷

Straus' threats and the RFC's dismal prediction of the project's fate did not come to pass. Realizing they were fighting a losing battle, by June 1933 Hillside's backers switched their focus and decided to pursue a loan from the newly organized Public Works Administration instead. Pursuit of the loan required the team to carefully lay out their plans for the development, detailing specifics as to what types of materials would be employed; the cost for site improvements, materials and labor; the length of construction;

¹⁸⁵ RFC quoted in *The New York Times*, "R.F.C. Defers Loan on Hillside Homes."

¹⁸⁶ *The Home News*, "Straus Warns Officials Delays May Cause Collapse of Hillside Project," March 6, 1933, Scrapbook, "Hillside Homes: March 17, 1933-May 24, 1933," Nathan Straus, Jr. Papers. It appears that Straus' threats were not unfounded. A *New York Times* article released on May 29 of the same year described how inflation was causing a steady rise in the price of building materials. *The New York Times*, "Cost of Building Continues to Rise," May 29, 1933, <http://proquest.com>.

¹⁸⁷ *The Home News*, "Straus Warns Officials Delays May Cause Collapse of Hillside Project," Nathan Straus Jr. Papers.

and the arrangement of buildings and other features on the site. If government assistance was received, Hillside's plan had to conform to certain prescriptions.

William C. McCloy, a journalist who, in 1936, studied the impacts of the government run-housing program, described some of these requirements in a subsequent report he compiled. With "Uncle Sam" as builder and landlord, McCloy explained, residential buildings could cover only 30 percent or less of the lot; heights had to be limited to three stories, four in New York City and Cincinnati where land prices were higher; individual apartments could be only two rooms deep and needed to provide substantial light and air; fire resistant materials were required; and buildings had to have at least a 60-year life span. This latter requirement was in place to comply with the loan's 60-year amortization period.¹⁸⁸ The design proposal formulated by Hillside's backers incorporated many, but not all, of these requirements.

Design Aims

On June 22, 1933, Eken, representing the Hillside Housing Corporation, submitted a proposal for the Hillside development to the Federal Emergency Administration of Public Works. A copy of the report, which had already been submitted to the State Housing Board, was included with the federal proposal. Within this proposal, the project's developers indicated their desire to acquire a federal loan to cover 85 percent of the building costs. The other 15 percent would be raised through the sale of

¹⁸⁸ McCloy, "Uncle Sam as Landlord," 8, John Nolen Papers.

stocks in the corporation to men like C.W. Wooley. Straus also took stocks in the corporation in exchange for the price of his Bronx land.¹⁸⁹

The proposal estimated total costs of construction to be \$5,544,017 with an additional \$721,346 needed to pay for the land, rights of way, and other site-related expenses, bringing the overall total to \$6,265,363. The requested amount from the government, \$5,325,559, was to be issued as a mortgage paid back in monthly installments over a period of forty years, “at the rate of 3.5 percent interest per anum with amortization at the rate of 1.25 per cent per anum.”¹⁹⁰

Reflecting a high level of preparedness and an eagerness to get the project started, the proposal estimated that work could begin only three weeks after securing the loan. One of the reasons the developers had such a high level of assuredness on this point is because they believed the previous year’s worth of planning ensured the development complied with “all the requirements of the Building Code” and so would have little difficulty securing the necessary permits from the Bronx Building Department.¹⁹¹ Also, reducing their earlier estimate as to the length of construction, the men now approximated that the project as a whole could be completed in 42 weeks, or a little over 10 months. Stein had never overseen the construction of so large a development in so short an amount of time before. Unlike with his comparably sized developments, Sunnyside and Radburn, Hillside had the advantage of a labor surplus and relatively low materials costs to help speed it along.

¹⁸⁹ *New York Herald Tribune* “Bronx Housing Project to Give Jobs to 1,000,” Nathan Straus Jr. Papers.

¹⁹⁰ Hillside Housing Development, “Application,” 8; Clarence S. Stein Papers.

¹⁹¹ *Ibid.*, 15.

Working on such a tight timetable would ensure the project stayed true to its outlined expenses, \$195,000 of which was the estimated cost of interest during the 10-month construction phase. The swift pace would also allow for quicker access to income from tenant rentals, which would be used to pay back the various investors. In the proposal, the anticipated number of men needed on the job site fell from earlier estimates, 700 men on site rather than the earlier projection of 1,000. However, the report promised that 3,000 additional factory workers “engaged in manufacturing materials and equipment to be used in the construction” would benefit indirectly from the project’s erection.¹⁹²

The report went on to explain how the buildings, which were to consist of 111 four-story walkups and 4 six-story automatic elevator units, would “be grouped around large garden spaces that will give far better light and ventilation than in existing dwellings of this type.”¹⁹³ How the project was able to incorporate six-story buildings when governmental regulations called for four stories or less is not known. To avoid the monotony that could occur when dealing with such a large complex of similar buildings, the proposal outlined the use of a total of nine different building types.¹⁹⁴ These various building types would contain 5,366 rooms, with a total of 1,435 apartments ranging from two to five rooms as well as a number of communal spaces.¹⁹⁵ The two-room apartments equated to a studio apartment, with a kitchen and living room. Three-room apartments had the addition of a separate bedroom while four-room apartments contained two bedrooms and five-room apartments held three bedrooms.

¹⁹² Hillside Housing Development, “Application,” 2; Clarence S. Stein Papers.

¹⁹³ *Ibid.*, 3, 5.

¹⁹⁴ *Ibid.*, “Inclusion,” “Application to State Board of Housing,” 2.

¹⁹⁵ *Ibid.*, 6.

Taking advantage of the sloping site, 167 apartments would be placed at the garden, or basement, level. These basement-level rooms would have 9-foot ceilings while all other levels would have 8-foot ceilings. The 8-foot ceilings of the upper floors followed the standard of the day, as stipulated under the city's Multiple Dwellings Law. The 9-foot basement ceilings resulted from the need to drop the ceilings on the floor above in order to provide space for plumbing pipes. The slightly higher ceilings had the advantage of making these subterranean units feel more spacious, thus increasing their desirability amongst potential tenants.¹⁹⁶

While the rooms at Hillside were not to be as large as those that could be found in higher-class apartments, Stein did try to make them spacious nonetheless, with gross floor area per room amounting to 217 square feet.¹⁹⁷ The application insisted that the proposed "room sizes are large enough" to remain competitive with other developments well into the future.¹⁹⁸ Another aspect of the units that the developers believed would remain modern for many years to come was the mechanical equipment in kitchens and bathrooms. They explained that these fixtures were to be "of a type that will prevent obsolescence because of competition in the future."¹⁹⁹

¹⁹⁶ *The New York Times*. "Advisory Group on Housing Ends," April 25, 1938. <http://proquest.com>; Michael Tomlan, Director of Graduate Studies in Historic Preservation at Cornell University, must be credited for explaining to this author the need for 9-foot ceilings in basement level units.

¹⁹⁷ Hillside Housing Development, "Application," Inclusion, "Application to State Board of Housing," 19; Clarence S. Stein Papers. A survey carried out at Hillside after its completion showed that actual room sizes were slightly larger, 221.6 square feet, while those at the second addition to Phipps were 232 square feet and apartments that fell into the category of "Better class" were typically 290 square feet. "Hillside Homes" sheet, Clarence S. Stein Papers, Box 4, Folder 17.

¹⁹⁸ Hillside Housing Development, "Application," 4; Clarence S. Stein Papers.

¹⁹⁹ Ibid.

A desire to include modern features played into other aspects of the design as well. The entire development was to be electrified, an amenity that three out of ten homes continued to lack into the early 1930s.²⁰⁰ As at his earlier developments, the expansiveness of the site, unconstrained by the long narrow lots on which traditional tenements could be found, made it possible for each unit to be only “two rooms deep” and carefully “arranged so as to give maximum of cross draft.” Another carryover from his previous projects was that all rooms were to have exterior views, with most of those at Hillside looking out “on garden courts which will be 75 ft. or more in width.”²⁰¹

Because Hillside was to be a community housing development rather than simply a grouping of apartment buildings, the designers intended to provide many amenities both inside and out so that residents would have spaces to gather and pursue various hobbies and initiatives. On the exterior, a crowning feature would be a “two acre playground.”²⁰² Plans also called for blocked off through streets and underpasses placed beneath busy cross streets, a site design innovation borrowed from Radburn. If this latter element of the scheme could be achieved, the report noted, “It will be the first attempt to secure safety from the automobile in a congested American city.”²⁰³ Indoor gathering spots would include community rooms and workshop spaces. Located at the basement level, some of

²⁰⁰ Thomas C. Jester, ed. *Twentieth-Century Building Materials: History and Conservation* (New York: McGraw-Hill, 1995), 38.

²⁰¹ Hillside Housing Development, “Application,” 3; Clarence S. Stein Papers.

²⁰² Ibid.

²⁰³ Ibid.

these communal spaces were designated in the proposal as “unassigned,” perhaps out of a desire to allow tenants to determine the best use as they saw fit.²⁰⁴

While the plan did include many amenities not traditionally found at similarly priced developments, like electricity, well-proportioned rooms, and an abundance of green space, there were nevertheless efforts to economize. One aspect of the development that was particularly aggravating to real estate interests was the lack of costs associated with the demolition or clearing of the site since Hillside was to be built on formerly vacant land. Another cost saving measure was that the buildings would not to be fireproof. In these initial plans, while the buildings would make use of a number of fire-resistant materials, including steel, brick, and concrete, they would also include a considerable amount of lumber.²⁰⁵ This aspect of the design was later amended when more favorable loan terms under the PWA agreement allowed for fireproof construction.²⁰⁶

In general, the materials proposed for the development tended toward the traditional. While more modern materials such as structural steel, metal trim, concrete and cement would be used, masonry, lumber, carpentry, ornamental iron, wood trim, lathing and plastering took up much of the budget. Masonry alone made up nearly one-fifth of the construction costs, totaling \$1,044,000. There are various reasons that Stein may have preferred to utilize traditional materials, which required traditional skills. One

²⁰⁴ Ibid., 5. Stein confirmed this sentiment in *Towards New Towns for America* when he discussed the “democracy of Hillside” and noted that “no specific use [for the community rooms] was determined in advance, 100, 107.

²⁰⁵ Hillside Housing Development, “Application,” Inclusion, “Application to State Board of Housing,” 10-11; Clarence S. Stein Papers. John Kendall Freitag, *The Fireproofing of Steel Buildings* (New York: J. Wiley & Sons, 1899), 76-77, <http://www.archive.org>.

²⁰⁶ Stein, *Towards New Towns for America*, 95. Stein, “Hillside Homes,” *American Architect*, 2.

reason might have been his own desire to design buildings that were durable and long lasting, thereby ensuring lower operation and maintenance costs long-term. Another reason, linked to the first, may have been to ensure compliance with the government stipulation that publically financed buildings have a sixty-year life span. A third reason might have been in reaction to the influence of organized labor, whom, it was explained above, aligned their support for Hillside's construction with the promise that the "regular mode" of building would be employed.

The high prices and inaccessibility of many more modern building materials might also explain Stein's preference for traditional materials. In June 1923, Stein confided to Lewis Mumford, his friend and critic, that while he and Eken:

Had hoped in the beginning to be able to do a great many new things in construction...we find, as we compare prices, that we are gradually coming back to the old methods. I still have confidence that there is going to be a great change in methods of construction and use of materials in apartments, but it is very difficult to take the first step. The building material people are experimenting, but none of them - American Radiator and others - have anything ready that one can use in a large development with assurance. It is very discouraging but we will have to keep pegging away and bring in one new process at a time.²⁰⁷

Stein did not clarify in this or his other correspondence on the exact nature of the modern building materials he hoped would soon acquire standard use. From his writings, it is likely he was referring generally to his desire for a future when more ready-made materials might be available that would decrease labor demands on the job site and speed up the construction process. However, it should be noted that Stein never chose to take advantage of many of the materials that resulted from technological advancements. For example, Stein could have substituted reinforced concrete for brick at Hillside and his

²⁰⁷ Letter, Stein to Lewis Mumford, June 21, 1932, Letters to Lewis Mumford 1924-1969, Clarence S. Stein Papers, Box 33, Folder 21.

earlier developments but chose instead to stick with the traditional material he knew and trusted.

Despite the use of traditional materials and building methods, Hillside was to be a distinct residential building development, not only in its design but also because of its affordability. Few comparable developments existed in the area, the Hillside Housing Corporation's report to the federal government asserted. The inclusion in the report of results from a neighborhood survey showed that most nearby apartments rented for roughly \$33 to \$45 per month. While Hillside would fall at the lower end of this spectrum, renting at an average of \$11 a room, the project's developers believed that the addition of many amenities not found at comparably priced buildings made it a superior living option.²⁰⁸

As noted above such a contention infuriated nearby landlords, who opposed the project not only because they viewed Hillside as competition during a time of high vacancy rates but also because its construction depended upon citizen's tax dollars. The price of \$11 per room was set so that Hillside would comply with a New York State Housing Law stipulation that required projects receiving government assistance in the Bronx to fall at or below that amount.²⁰⁹ Hillside's developers predicted the development would "fill the need of a great part of the working population with \$1,700 to \$2,500 family incomes," like clerical workers.²¹⁰

For people earning such incomes, the Hillside Housing Corporation believed their development represented "a far better place in which to live as to light, ventilation,

²⁰⁸ Hillside Housing Development, "Application," 3-4, 21, Clarence S. Stein Papers.

²⁰⁹ Ibid., 18.

²¹⁰ Ibid., 3-4.

openness, and safety than they have been able to secure at far higher costs” elsewhere.²¹¹ Such a price would still put the development out of reach of many of the city residents, three-quarters in fact, according to housing advocate Henry Churchill. He insisted that that three-fourths of the city’s population could not afford to “pay more than \$6.20 a room.”²¹² Despite Stein and Eken’s best efforts to economize in their plans for the development, their desire to provide tenants with a comfortable and humane place to live that also afforded many amenities meant that Hillside could not be a viable alternative for the city’s most needy inhabitants.

Conclusion

By June of 1933 a viable funding scheme was once again on the table and by September of 1933 the final site plans were complete. [Figure 2.7.] The newly formed Hillside Housing Corporation was ready to see apartments emerge from the long-fallow piece of land in the northeast Bronx. Unfortunately, despite their hopes that the Public Works Administration might provide “early consideration” on the submitted application, the loan was not approved until September and it was not until March 1934 that the final contracts were signed and the long-anticipated project could finally commence.²¹³

During the intermediate period, when speaking of Hillside, Stein’s letters to Aline frequently adopted a dejected tone. At one point he even went so far as to declare, “to

²¹¹ Hillside Housing Development, “Application,” 4, Clarence S. Stein Papers.

²¹² *New York World Herald*, “Money Rates Slum Solution, Architect Says,” Nathan Straus Jr. Papers.

²¹³ Hillside Housing Development, “Application,” Cover Letter, Clarence S. Stein Papers. *World Telegram*, “Hillside Firm Gets PWA Loan,” January 23, 1934, Scrapbook, “November 1, 1933-March 25, 1934,” Nathan Straus Jr. Papers.

hell with Hillside.”²¹⁴ There was the constant “struggle” with bureaucracy,²¹⁵ the endless “waiting” for answers and approvals,²¹⁶ and the “pettiness” and infighting amongst Eken, Straus, and himself.²¹⁷ Even as things started to look up by the end of 1933, Stein confided to Aline, “I guess it is being so near the end that has got on my nerves. End. There is no end. Even when the papers are all signed the end will be only the beginning.”²¹⁸

Slowly but surely the project did inch closer to the conclusion of the planning stage and the beginning of the construction phase. A news release from March 1934 explained how, at the time of the approval, no other housing development compared to Hillside in size.²¹⁹ This truly was to be an experiment in housing, to show what could be done when private and public hands joined together to create and fund residential options that refused to sacrifice quality for quantity.

²¹⁴ Stein, Letter to Aline McMahon Stein, December 23, 1933, Box 34, Folder 5.

²¹⁵ Stein, Letter to Aline, June 18, 1933, Box 34, Folder 2.

²¹⁶ Stein, Letter to Aline, November 23, 1933, Box 34, Folder 5.

²¹⁷ Stein, Letter to Aline, November 28, 1933, Box 34, Folder 5.

²¹⁸ Stein, Letter to Aline, December 5, 1933, Box 34, Folder 5.

²¹⁹ *The Home News*, “Contract for \$5,050,000 Federal Loan in Hillside Housing Project is Filed,” March 23, 1934, Scrapbook, “November 1, 1933-March 25, 1934;” Nathan Straus Jr. Papers.

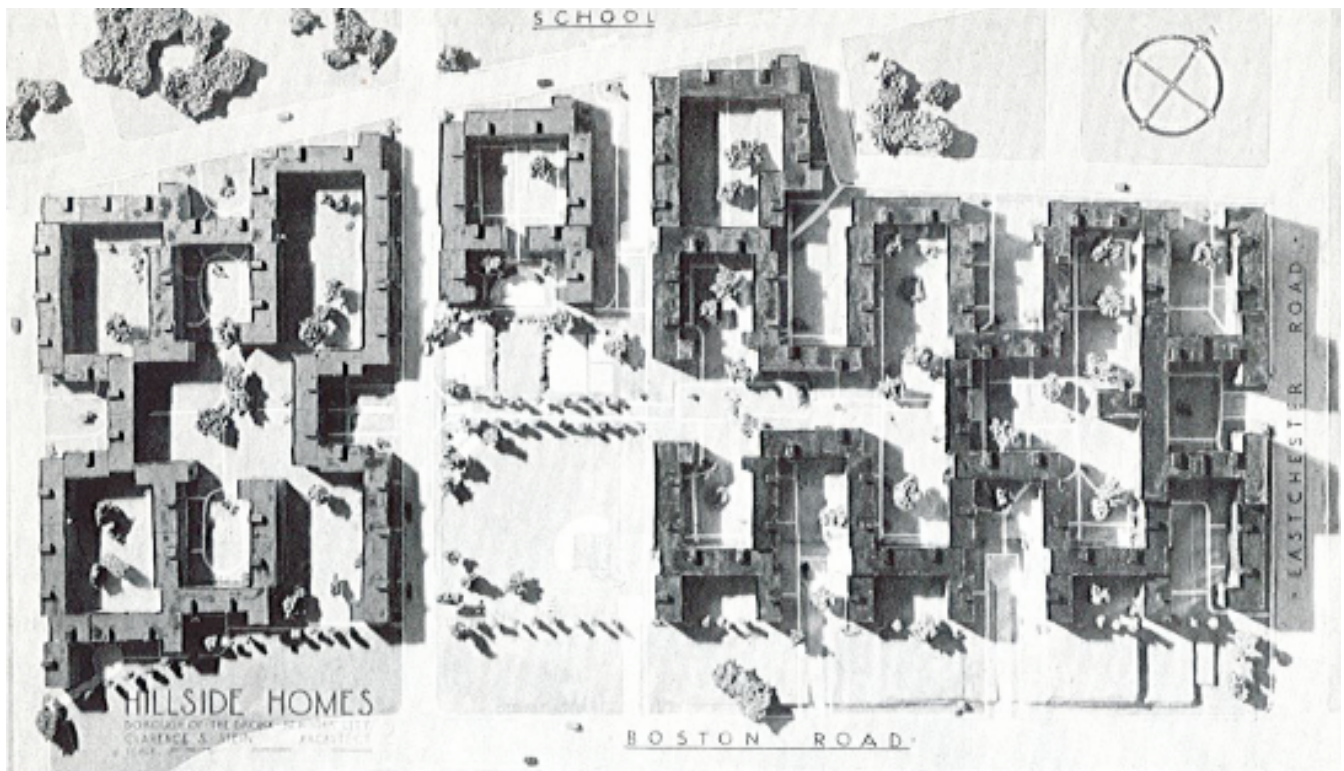


Figure 2.7. Final Site Plan for Hillside Homes. September 1933.
Stein, *Towards New Towns for America*, 101.

CHAPTER THREE

THE REALITY OF CONSTRUCTION

On March 31, 1934, representatives of the local, state, and federal governments met with members of the Hillside Housing Corporation to sign the final documents approving the financing scheme for Hillside. After the event, Eken publically announced, “We will speed up the process to the limit and within a short period 1,000 men will be at work.” Reflecting an eagerness to get the job moving well before the signing of this contract, prep work for the site began in January, with the land cleared of 14,000 cubic yards of stone and dirt.²²⁰

By April, carpenters were at work on the site sawing up lumber to be used for the the project. [Figure 3.1.] Students at P.S. 78, the school adjacent to the Hillside site, observed the work that went on from this early stage. They saw their former “playlands and gardens, torn by the angry jaws of steam-shovels, and leveled by bulldozers.”²²¹ After two long and turbulent years of planning and design, powerful machines quickly upended the once “peaceful tract” on which Hillside would soon sit to make way for the building foundations of the five sizable units that 1,550 families would call home.²²²

The next 22 months were busy ones. Stein continued to refine the design even as the necessary legal documents were secured. Men and machines were constantly employed. Though their working days coincided with extreme temperatures and small bursts of controversy, the men rarely ceased in their endeavor to bring the vision to reality. Stein reveled in the sheer immensity of the Hillside project and the amount of

²²⁰ *The New York Times*, “Construction Work is Pressed on 3 Model Housing Projects,” November 18, 1934, <http://proquest.com>.

²²¹ *A.H.S. Record*, January 1935, P.S. 078, Anne Hutchinson School, Bronx, New York.

²²² *Ibid.*

detail required for its steady production. In a letter to Aline on February 22, 1934, during the early stages of construction, he remarked:

I am so busy there is nothing to write about. Just drawings, drawings, drawings, windows, thousands of windows all to make patterns on the exterior of walls but every one placed just where the woman inside will want it. Windows, windows, regiments of windows, and steps – and never one on which to slip or trip – and closets in which you can put your hand on every suit, five thousand closets. And hooks and hinges and incinerators and slop sinks and recreation rooms and door knobs and nurseries and the size of brick-joints. That's architecture.²²³

This chapter will explore the construction process that led to Hillside's realization, including an examination of those minute details of architecture that kept Stein on his toes over the course of the project. The chapter will open broadly, discussing the construction demands Hillside's backers had to contend with throughout the building phase. Controversies that continued to accompany this stage of the project will then be explored as will the design revisions necessitated by client preference and economics. Next the specifics of who was employed at the site, the nature of their work, and a timeline of construction will be provided. The chapter will conclude with a discussion of the finished product and a brief analysis of the types of people who first called Hillside home.

²²³ Letter, Stein to Aline McMahon Stein, Clarence S. Stein Papers, February 22, 1934, Box 34, Folder 7.

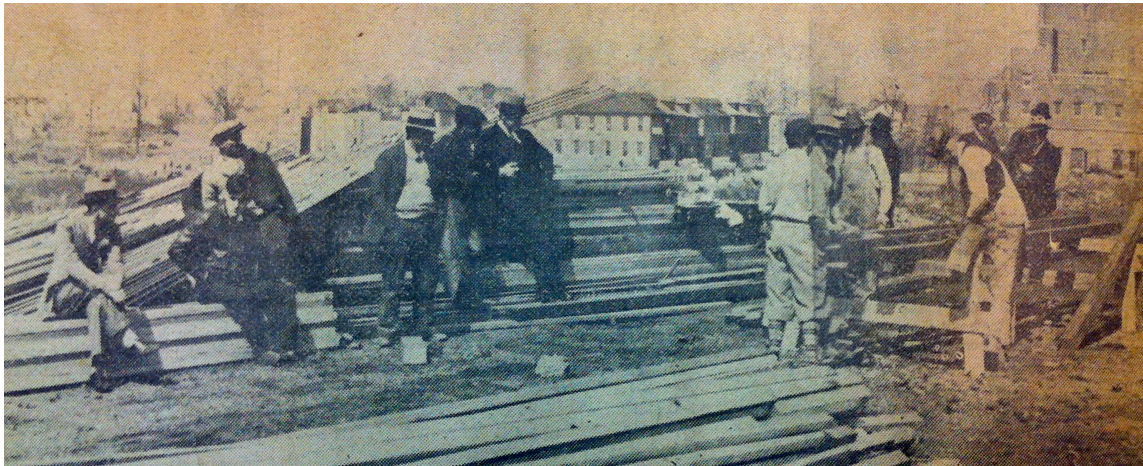


Figure 3.1. Carpenters sawing lumber at the Hillside site while observers look on
The Daily Mirror, "This Means 8,000 Jobs," April 3, 1934, Scrapbook, "March 30, 1933-July 6, 1934,"
Nathan Straus, Jr. Papers.

By the time Mayor LaGuardia ceremoniously lifted the first shovelful of earth on April 19, 1934, officially marking the commencement of construction, jobs for hundreds of unemployed building tradesmen and better housing for many lower-income families appeared to be within grasp.²²⁴ Hillside was finally rising.

Hillside's Construction as Both Typical and Unique

If Hillside's construction were examined through a broad lens, many of the steps taken followed a course similar to that of all building projects of the 1930s and even of the present time. Construction documents, in the form of building specifications and drawings, were produced. The federal, state, and local governments as well as the local building department and the project's contractors and subcontractors used these documents to understand the nature of the work from both a design and structural standpoint. Before the start of any actual construction, building permits were secured. Frank Vitolo, acting as the "agent for the contractor," made one of the first applications on January 24, 1934, requesting permission to erect concrete footings and foundation walls of Portland Cement.²²⁵ The building department reviewed this and all subsequent applications, checking for any overlooked or missing pieces of information, before deciding whether to grant approval.

So that the correct amount of Portland Cement, and all the other materials and machinery needed to complete the work, were present at the site when necessary contracts with materials manufacturers and sub-contractors were drawn up. Starrett

²²⁴ *The New York Times*, "\$6,000,000 Housing Begun By Mayor," April 20, 1934, <http://proquest.com>.

²²⁵ Hillside Homes File, New York City Buildings Department.

Brothers & Eken, as the general contractors, started this process in early February, which, Stein explained to Aline, was done in an effort to be ahead of the release of the “builder’s code” when “all prices [would be] frozen.”²²⁶ In addition to beginning site preparation work and embarking on the lengthy permitting process, insurance for all employees who would work on the construction site was acquired.²²⁷ This action was stipulated under the Workmen’s Compensation Law, an act passed by the New York State Legislature in 1914, which guaranteed workers’ restitution for any injury obtained on the job in exchange for their agreement not to sue their employer.²²⁸

While acquiring permits, securing materials contracts, and obtaining insurance was, and remains, typical protocol for most building projects, the additional layer of PWA financing at Hillside required that extra steps and considerations be taken. One notable indication of this was in the hiring process. With labor rights a primary emphasis in many New Deal initiatives, including under the National Industrial Recovery Act discussed above in Chapter Two, it is understandable that a government-backed project would set minimum standards as to who could be employed, for how long, and for how much. The contract Hillside Housing Corporation signed with the PWA stipulated “a 30-hour work week and minimum wages to be fixed by the government...for skilled as well

²²⁶ Letter, Stein to Aline McMahon Stein, Clarence S. Stein Papers, February 14, 1934, Box 34, Folder 7. Stein does not elaborate on the particulars of this “builder’s code” and the author was not able to determine the exact nature of the reference but it may refer to an ordinance imposed by the PWA under the loan contract.

²²⁷ Hillside Homes File, New York City Buildings Department.

²²⁸ New York City Bar, “A Guide to Workers’ Compensation in New York,” 2007, accessed September 19, 2013, <http://www2.nycbar.org/Publications/WorksCompensation.htm>.

as unskilled labor.”²²⁹ Setting a 30-hour work week reflected the PWA’s efforts to increase employment figures as it only controlled how much, and not how many, men worked on the site at any one time.

Additionally, the contract stipulated that qualified tradesmen should be given hiring preference. War veterans with dependents had top priority. Next in line were residents of the city of New York or the Bronx “who are citizens or have declared an intention to become citizens” and finally residents of New York State “who are citizens or have declared their intentions.”²³⁰ At Hillside, and other federally financed construction projects of the era, the government was able to hold private companies accountable for maintaining a number of labor standards that only a handful of states had instituted piecemeal up to that time. The attempts under the National Industrial Recovery Act to make labor reform a national agenda faltered in 1935 when the Supreme Court struck the act down as unconstitutional. It was not until the introduction of the Fair Labor Standards Act of 1938 and the Veterans’ Preference Act of 1944 that the labor practices required at public works projects like Hillside became compulsory nationwide.²³¹

To ensure that Hillside’s developers adhered to labor standards and other contract stipulations, the federal authorities and members of the New York State Housing Board

²²⁹ *The Home News*, “Contract for \$5,050,000 Federal Loan in Hillside Housing Project is Filed.”

²³⁰ *New York Telegram*, “Straus Denies Moses’ Charge,” October 19, 1934, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers; *The Home News*, LaGuardia and Lyons to Break Ground at Hillside Housing Project Ceremony Today,” April 19, 1934, Scrapbook, “March 30, 1934-July 6, 1934,” Nathan Straus Jr. Papers.

²³¹ Jonathan Grossman, “Fair Labor Standards Act of 1938: Maximum Struggle for a Minimum Wage,” *The Monthly Labor Review* (June 1978), accessed September 19, 2013, <http://www.dol.gov/oasam/programs/history/flsa1938.htm>; United States Office of Personnel Management, “Veteran Services: Vet Guide,” accessed September 19, 2013, <http://www.opm.gov/policy-data-oversight/veterans-services/vet-guide/>.

became active participants during the construction phase. The State Housing Board had direct supervision over the project. Although Starrett Brothers & Eken had the task of managing the day-to-day operations, overseeing buying, hiring, and scheduling, a contemporary newspaper article detailed how “all contracts and sub-contracts, including the purchase of materials and disbursements of funds,” took place under the watchful eyes of State Housing Board members.²³² As the project’s largest financial contributors, the federal government also needed to ensure that Hillside reflected high standards of design and enduring structural soundness. Even with this additional government oversight, or, in some instances, because of it, the project continued to experience tensions and controversies throughout the construction process.

Pervading Tensions

Speaking on April 2, shortly after the signing of the PWA contract, Nathan Straus optimistically proclaimed that Hillside would act as a model for better affordable housing options in the city and show what could be accomplished when public funds financed the visions of altruistic builders and architects. He went on to credit “the civic groups and the newspapers which have stood by us in this victorious fight.”²³³ While Straus’ idealistic declaration of victory over all of Hillside’s obstacles was likely just what the project’s backers and supporters wanted to hear at this point, his statement ignored the considerable uncertainty that swirled around the project during the early stages of

²³² *The Home News*, “Contract for \$5,050,000 Federal Loan in Hillside Housing Project is Filed.” J.P. Lohman, “Speaking of Real Estate,” *New York City American*, May 22, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

²³³ *The New York Times*, “Hillside Housing Praised By Straus,” April 2, 1934, <http://proquest.com>.

construction. Speaking at this time, he also could not predict the debates that would come later. In April 1934, the fight was not yet over and Hillside was not yet a clear champion.

Stein, on the other hand, through the more private means of personal correspondence, revealed his own unease with the project's questionable status and the "ridiculous obstacles" that continued to threaten progress. Even though the project appeared well advanced by late spring, with the PWA contract signed and excavation work underway, Stein's worries proved grounded. By this point, charges of preferential treatment and unfair hiring practices emerged that plagued the project for many months thereafter. For a short time, the Bronx real estate men also appeared to renew their opposition to the project. In March, after a long period of silence, Stein told Aline of their attempts to obstruct the project's receipt of permits from the Bronx Building Department.²³⁴ This small hurdle disappeared shortly thereafter, and did not attract the type of media attention that accompanied accusations directed at members and affiliates of the Hillside Housing Corporation and the federal government.

In early March, Stein's own connection to Robert D. Kohn, head of the PWA's Housing Division, was scrutinized when critics asserted that PWA approval for Hillside's federal loan reflected special preference since Kohn and Stein shared an architectural practice.²³⁵ By June, the federal government's embarrassment with Kohn's work meant he was forced to resign from his position. Stein expressed concern that because of his connection to Kohn, he might be the next one to "get it" and Hillside might falter after having only just begun. On June 18, Stein described to Aline how he was carefully

²³⁴ Letter, Stein to Aline McMahon Stein, March 12 and March 14, 1934, Clarence S. Stein Papers, Box 34, Folder 8.

²³⁵ Letter, Stein to Aline McMahon Stein, March 1, 1934, Clarence S. Stein Papers, Box 34, Folder 8.

reviewing all contracts, drawings and specifications to make sure all was in order so that there would be no justification for possible complaints of his “neglect on the job.”²³⁶

Accusations of preferential treatment spread well beyond Stein’s association with a high-ranking employee of the federal government. Indeed, both labor groups and politicians found fault with the hiring process and acquisition of materials at Hillside. Initially, while some Bronxinites continued to fear that such a large development might oversaturate the neighborhood’s goods and services, those connected to the building trades believed the project afforded a chance to reverse their dismal economic situations through employment on the site.²³⁷ Soon, however, local union organizers began to voice their concern over the small number of Bronxinites being hired and asked, through Bronx Borough President Lyons, that local hiring be made a top priority, even over the employment of fellow citizens of New York.²³⁸

Eken responded by reassuring local tradesmen that, “It is a long-time policy of our company [Starrett Brothers & Eken] to use local labor and local contractors wherever it is possible to do” and that the firm would “go to the limit to keep the employment and contracts in the Bronx, wherever it is possible to do so.” Eken pointed out that the building firm had already proved their commitment to local hiring by engaging two Bronx businesses, the Tremont Subway Construction Corporation and the Grossman Steel Stair Corporation, to carry out work on site excavation and stair manufacturing,

²³⁶ Letter, Stein to Aline McMahon Stein, July 18, 1934. Clarence S. Stein Papers, Box 34, Folder 9.

²³⁷ *The Home News*, “Contract for \$5,050,000 Federal Loan in Hillside Housing Project is Filed.”

²³⁸ *Ibid.*

respectively.²³⁹ Adding in the stipulation, “wherever it is possible to do so,” however, revealed the building firm’s intention to commit to local hiring only so far as the practice pertained to the best interests of the project overall and fit within the PWA contract requirements.

Despite the building firm’s early promises, hiring locally remained a contentious issue into the middle period of construction. In September 1934, a group of 100 union bricklayers from the Bronx presented Starrett Brothers & Eken with a petition stating their belief that “they were not getting a ‘square deal’ from subcontractors in charge of bricklaying on the project” and requested that the situation be remedied.²⁴⁰ Russell H. Hunter, vice-president of the firm, denied the charge and countered that Starrett Brothers & Eken adhered to the labor stipulations set by the PWA contract. He also pointed out that, although Hillside was a large undertaking, it really only had a need for a certain number of men from each trade, 250 bricklayers for example, and could not be expected to provide relief for all of the unemployed men in the Bronx.²⁴¹

In October 1934, however, it came to light that many of those employed on the site came from outside the borough as well as the city and some of those engaged even came from outside the state. The Bronx Chapter of the Building Trades Civic League presented these findings after studying the license plates of men working on the site. The Chapter also noted that “of the 3,000 unemployed building trade mechanics in the Bronx

²³⁹ *The Home News*, LaGuardia and Lyons to Break Ground at Hillside Housing Project Ceremony Today.”

²⁴⁰ *The Home News*, “Bronx Workers Are Given Square Deal, Contractor on Hillside Project Declares,” September 7, 1934, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

²⁴¹ *The Home News*, “Bronx Workers Are Given Square Deal, Contractor on Hillside Project Declares.”

Chapter, at least 50 per cent are veterans” and yet none of them were given employment at Hillside.²⁴²

Members of the State Housing Board and the building firm continued to deny such accusations, maintaining that they followed the federal government’s employment regulations in their dealings with labor groups. In a letter to Robert Moses, whose own slew of accusations toward the project will be discussed below, Hunter made an additional point on the employment charge that highlights the power of the unions in New York City at this time. He stated that the project’s hiring was done through union organizations rather than local employment agencies. This was a common practice in the city, Hunter maintained, that the government contract permitted. “Since practically all labor in building trades is organized labor,” Hunter explained, “the employment has been done on this job in the customary way through the recognized union locals.”²⁴³

The books produced by the children of P.S. 78 attest to the strong union presence on the job site. In their detailed descriptions of the many trades employed on the project, the students included the insignia of the union with which that specific trade’s members were associated.²⁴⁴ [Figure 3.2.] Unfortunately their descriptions and contemporary newspaper sources do not detail which local branches the tradespeople hailed from, so it is difficult to ascertain the veracity of either faction’s assertions in this particular dispute over the hiring of local labor.

²⁴² *The Home News*, “Hillside Housing Heads Vigorously Dispute Moses’ Patronage Charge,” October 18, 1934, Scrapbook “July 7, 1934–October 19, 1934,” Nathan Straus Jr. Papers.

²⁴³ *New York City Herald Tribune*, “Text of Moses-Hunter Letter Involving Straus Charge,” October 27, 1934, Scrapbook, “July 7, 1934–October 19, 1934,” Nathan Straus Jr. Papers.

²⁴⁴ *A.H.S. Record*, January 1935 and June 1935.

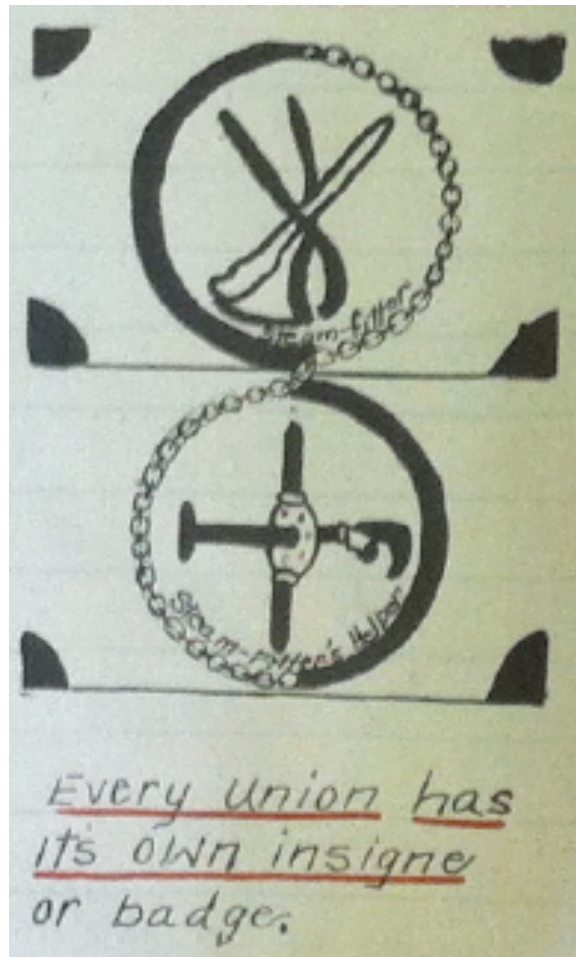


Figure 3.2. Drawings of union badges worn by those employed at Hillside.

Produced by students at P.S. 78.

A.H.S. Record. June 1935, P.S. 078, Anne Hutchinson School, Bronx, New York.

Because the accusers were not actually employed on the site and union groups dominated there in any case, the tradesmen had little recourse beyond beseeching their borough president, the building firm, and the State Housing Board to look into the matter. Met with denials by the latter two groups, the tradesmen were left to wait and hope that more building jobs elsewhere opened up.

Bronxites from the building trades were not the only ones to find fault with the project's hiring process. Robert Moses, a powerful figure who was head of the city and state park departments as well as a number of other public works authorities at this time,²⁴⁵ began his attacks against Hillside and its affiliates in October 1934.²⁴⁶ Unlike the Bronx tradesmen, who made their charges out of economic desperation, Moses's allegations were politically driven. He initiated his outspoken criticism in the midst of his bid for New York State Governor running on the Republican ticket.

Moses's main charge was that Hillside represented one giant "patronage mill" in which two Democratic heavyweights, Postmaster General James A. Farley and Secretary of State Edward J. Flynn, doled out Hillside jobs to their supporters. Because "NRA price fixing regulations cause[d] all bids to be entered at the same figure," Moses alleged, favoritism played an important role in determining the final selection of otherwise comparable bidders.²⁴⁷

²⁴⁵ City of New York Parks and Recreation, "Robert Moses and the Modern Park System: 1929-1965," accessed September 19, 2013,

<http://www.nycgovparks.org/about/history/timeline/robert-moses-modern-parks>.

²⁴⁶ *New York Sun*, "Moses Charges Housing Jobs Go For Votes," October 17, 1934, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers.

²⁴⁷ *New York World Telegram*, "Hillside Project 'Patronage Mill,'" October 17, 1934, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers; *New York City Herald Tribune*, "P.W.A. Jobs are Vote Bait, Moses Holds," October 18, 1934, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers.

Moses further claimed that Flynn used his position and “jurisdiction” over the State Housing Board to sway opinions on who should be hired. He also alleged that Farley made sure that a firm with which he was connected, General Builders Supply Company, an organization which Moses termed “a racket,” benefited from large contracts on the materials supply end.²⁴⁸ When Moses felt these particular allegations did not have their desired effect, he aimed an attack at Straus. He denounced Straus, a former colleague and friend, for making a windfall \$200,000 from the sale of the Hillside property. Moses claimed Straus sold the land for “twice its assessed valuation” and withheld the valuable strip of property along Boston Post Road from the sale so that it could be sold for more money once the Hillside development was underway.²⁴⁹

Many, including Straus, did not take Moses’s allegations seriously, viewing them instead as trite attempts to deface supporters of Governor Herbert Lehman, the Democratic incumbent and Moses’s opponent in the race.²⁵⁰ In an effort to show the preposterousness of Moses’s claims, the building firm, the State Housing Board, along with the other accused, made rebuttals.²⁵¹ Flynn and Farley were said to have no influence over the project and the General Builder’s Supply Company was described as being just one of the five firms supplying materials at Hillside.²⁵² In fact, the accused

²⁴⁸ *The Home News* “Lehman Has Proof of Flynn Meddling in Hillside Project, Moses Declares,” October 19, 1934, Scrapbook “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers; *New York World Telegram*, “Hillside Project ‘Patronage Mill.’”

²⁴⁹ *New York City Herald Tribune*, “Moses Letters to Straus Charge,” October 27, 1934, October 27, 1934, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers; *New York City Herald Tribune*, “Moses Accuses Straus of Bronx Land Deal; Liberals Warn Lehman,” October 27, 1934, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

²⁵⁰ *New York City Herald Tribune*, “Moses Accuses Straus of Bronx Land Deal.”

²⁵¹ *New York Telegram*, “Straus Denies Moses’ Charge.”

²⁵² Straus, *The Reminiscences of Nathan Straus*, 115-116.

countered, the General Builder's Supply Company, with whom Starrett Brothers & Eken had collaborated on many projects previously, was given only 33½ percent of the brick and plaster contracts and none of the cement, sand, or lime contracts, all materials which the project required in large quantities.²⁵³

Moses' accusation of Straus's financial windfall was also denied. Instead of selling off the Bronx property for an exorbitant price, supporters asserted, Straus actually sold the land for a reduced rate. That rate, 70 cents per square foot, was well below the amount paid for the other two PWA projects simultaneously underway in New York City, Boulevard Gardens and Knickerbocker Village, and made possible the inclusion of amenities like the expansive open space around Hillside's buildings.²⁵⁴ Friends of Straus told reporters that the strip of land along Boston Post Road was not included in the sale due to criticism from the State Housing Board that a housing project should not be located along such a busy street. These refutations to Moses's charge also indicate that the Hillside Housing Corporation only purchased two-thirds of the land for the development from Straus and that the remainder came from owners of adjacent parcels at an average rate of \$1.15 per square foot.²⁵⁵

In the end, while the accusations aimed at Hillside during the construction phase did create a stir of negative attention in the press and headaches for the accused, none of the incidents described above actually succeeded in fulfilling Stein's worst fears of stopping the project altogether. Although Hillside did take longer to complete than its

²⁵³ *The New York Times*, "Housing Jobs Used to Aid Democrats, Moses Declares," October 18, 1934, <http://proquest.com>.

²⁵⁴ *New York City World Telegram*, "Straus Group Denies Charge of Land Deal," October 27, 1934, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers.

²⁵⁵ *Ibid.*

builder and architect predicted, it did not fall prey to the delays experienced by Boulevard Gardens and Knickerbocker Village, its contemporary New York City PWA projects. Both of these latter developments experienced significant interruptions as they dealt with lengthy jurisdictional disputes over which trades had the right to install certain items. While Eken estimated in April 1934 that work would conclude by April 1, 1935²⁵⁶ and Stein predicted in November 1934 that the first 20 apartments would be move-in ready slightly earlier, by March 1935,²⁵⁷ the first unit was not ready for occupancy until June 1, 1935 and the final unit did not open until October 1935.²⁵⁸ What actually hampered truly swift progress at Hillside were not strikes or other flashy controversies but more mundane, yet nevertheless imperative, issues like design revisions, material production, and building permits.²⁵⁹

Headaches and Heartaches

With the physical site work under way and legal documents gathered, Stein continued to spend much time at his drawing board. Bent over the table, he refined the design so as to appease the financial demands of the building firm, the bureaucratic requirements of the PWA, and the legal codes of the building department, all while still ensuring that Hillside met his own desires for aesthetic beauty and livability. Stein's

²⁵⁶ *The New York Times*, "Hillside Housing Praised By Straus."

²⁵⁷ *The New York Times*, "Construction Work is Pressed on 3 Model Housing Projects."

²⁵⁸ Hillside Homes File, New York City Buildings Department; J.P. Lohman, "Speaking of Real Estate," *New York City American*, May 17, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers; *The New York Times*, "Hillside Homes Fast Filling Up," September 18, 1935, <http://proquest.com>.

²⁵⁹ *The New York Times*, "Construction Work is Pressed on 3 Model Housing Projects."

letters recount the many “headaches and heartaches”²⁶⁰ that accompanied this period of the Hillside project as he and his collaborators debated the virtues of various materials and then presented their design visions to the State Housing Board for the desired approvals. Celebrating the physical progress that accompanied every design choice agreed upon, Stein set to work figuring out many of the finer details, such as how elaborate to make the façade and what types of bricks and windows to use.

When considering the brick choice, Stein scrutinized his earlier developments. In a letter to Aline in February 1934, he mentioned going to Sunnyside to “see some brick work, as a check on what I am proposing for Hillside.”²⁶¹ Eken and Hunter wanted Stein to scale down the ornamental brickwork on the exterior and consider using white brick instead of red for the facades because of the cost-savings that could be achieved. By 1934, Hunter was an active presence at design review meetings and on the building site. He was also a thorn in Stein’s side. Stein complained to Aline on a number of occasions about this “blustering partner” of Eken’s with whom he had “heated arguments” about Hillside’s architectural details.²⁶²

It appears that much of Stein’s distaste for Hunter could be traced to the latter’s business acumen and concern for the financials above all else. Hunter was “hard-boiled,” according to Stein, and believed “architects are wasteful.” He wanted Stein to scale down

²⁶⁰ Letter, Stein to Aline McMahon Stein, July 11, 1934, Clarence S. Stein Papers, Box 34, Folder 10.

²⁶¹ Letter, Stein to Aline McMahon Stein, February 17, 1934, Clarence S. Stein Papers, Box 34, Folder 7.

²⁶² Letter, Stein to Aline McMahon Stein, March 1, 1934, Clarence S. Stein Papers, Box 34, Folder 8.

the ornamental bands of brick on the exterior because leaving them would require additional man-hours from bricklayers, therefore increasing overall costs.²⁶³

Using white bricks would also keep costs down, according to Eken and Hunter, but Stein worried that the lighter color could become more easily tarnished with “children’s dirty finger prints.”²⁶⁴ The situation involving the brick color and the divergent viewpoints taken by builder and architect alluded to much of the tension that pervaded Stein’s interactions with Eken and Hunter. While Stein may not have been fond of Eken and Hunter’s approach to architecture, the presence of men like them, with their keen financial sense and ability to see an added dimension of the overall picture, was necessary to bring Stein’s vision to reality.

During disputes such as these, however, Stein did exhibit his willingness to compromise. The ornamental work was simplified. Once complete, Stein even admitted to Aline that while “the new design was different,” it was “just as good as the old.”²⁶⁵ Stein also conceded to the use of white brick. The State Housing Board, on the other hand, did not. According to Stein, they considered the white brick too “experimental.” Stein also confided to Aline that he thought the Housing Board’s disapproval stemmed from the influence of the Hudson River brick producers, whom he claimed were “pulling the strings” to ensure that their red brick was used on large housing projects like Hillside.²⁶⁶

²⁶³ Letter, Stein to Aline McMahon Stein, February 6, 1934, Clarence S. Stein Papers, Box 34, Folder 7.

²⁶⁴ Letter, Stein to Aline McMahon Stein, February 15, 1934, Clarence S. Stein Papers, Box 34, Box 34, Folder 7.

²⁶⁵ Letter, Stein to Aline McMahon Stein, February 6, 1934.

²⁶⁶ Letter, Stein to Aline McMahon Stein, June 12, 1934, Clarence S. Stein Papers, Box 34, Folder 9.

Even though Eken and Hunter presented the board with a technical report that explained how the use of white brick would save \$75,000 and would be of a far superior quality to any red brick the firm could afford,²⁶⁷ on June 26th, the Housing Board officially disapproved of the white brick. With that decision made, Stein then set out to “see if we can get a good looking red Hillside.”²⁶⁸ After four months of debate, the bricks were finally chosen in July, having met both Stein’s aesthetic requirements and Eken and Hunter’s economic sensibilities. Specially made for the project by the Denning’s Point Bricks Works, located in the Hudson Valley, Hillside’s bricks measured $8\frac{1}{4} \times 3\frac{3}{4} \times 2\frac{5}{8}$. They were slightly larger than standard size and favored for their economy and efficiency, “saving in the number of bricks laid and handled,” Stein later recalled.²⁶⁹

As the brick debate came to a close, Stein expressed his frustration with the top-down approach to affordable housing. In talking with others who shared these sentiments, Stein told Aline, they agreed upon the need to “start at the bottom, work with those who need the houses rather than the government. In short, create a demand by labor groups, a demand that the government will have to listen to.”²⁷⁰ This idea of a more collective approach to design in which the end-users, rather than the policy heads, make the decisions, coincides with Stein’s earlier declaration, discussed in Chapter Two above, that workers should be allowed to design houses for themselves.

²⁶⁷ Letter, Stein to Aline McMahon Stein, June 20, 1934, Clarence S. Stein Papers, Box 34, Folder 9.

²⁶⁸ Letter, Stein to Aline McMahon Stein, June 27, 1934, Clarence S. Stein Papers, Box 34, Folder 9.

²⁶⁹ Stein, “Hillside Housing,” *American Architect*, 15.

²⁷⁰ Letter, Stein to Aline McMahon Stein, July 7, 1934, Clarence S. Stein Papers, Box 34, Folder 10.

Such a vision of publically driven design remained out of reach for Stein, however, and continues to frequently go unaddressed today, perhaps because bringing more people to the drawing board can create an added layer of complexity that bureaucrats, developers, and architects do not want to encourage. Despite Stein's vocal desires to the contrary, Hillside was designed without the specific needs or wants of any one demographic in mind. Instead, as often occurs even today, Stein and his design collaborators chose which features to include based upon their own educated opinions, informed by careful studies, of what would work best for Hillside's residents.²⁷¹

In addition to the delays caused by uncertainties over the particulars of materials, the Hillside project was held up by difficulties securing permits, particularly for those aspects of the design that did not conform to the typical construction standards and procedures. Vitolo filed plans for the first two units, both four-story walkups, with the Bronx Building Department by early April. Many delays accompanied both of these plans, requiring Vitolo to resubmit the documents with additional materials or details included. By calling into question some of Hillside's design choices, the building department's goal was likely not to be unduly difficult. Instead, their purpose was to ensure the development met all the current requirements for health and safety, as laid out in the city's building codes. As such they raised concerns when features like the wall supports did not appear to meet code; when vital pieces of information like the roof and basement loads were missing from plans; and when seemingly frivolous, but allegedly

²⁷¹ Stein, "Hillside Housing," *American Architect*, 3.

illegal, features like “pleasure balconies in [the] courts,” found their way into the design.²⁷²

Acting on Stein and the building firm’s behalf, Vitolo responded to these disapprovals in a way that proved his intricate knowledge of “the practice and law of building.”²⁷³ Stein’s post-construction recollection of Vitolo’s mastery at securing approvals for the architect’s “unorthodox plans” is reflected in the building department’s file on the project.²⁷⁴ When arguing for aspects of the design that the Building Department disapproved of, such as those features that did not appear to meet code, Vitolo would point to other sections in the code that did in fact permit the intended use as presented in the Hillside specifications.

Alternatively, Vitolo would describe in more detail the building’s various components, such as its fireproof construction, its ample supply of large windows, or, in the case of the alleged “pleasure balconies,” their functionality as fire escapes, to bolster his argument that approval should be given. In most cases, Vitolo was successful in his counter-arguments and those most vital and visible pieces of the design, such as the upper balconies and the basement apartments, which opened onto the interior courts, managed to garner the necessary approvals for inclusion in the final vision.²⁷⁵

Endless Obstacles

Unfortunately, the tensions did not end once the material decisions were made and the building permits secured. Instead, well into construction, a number of “unsettled

²⁷² Hillside Homes File, New York City Buildings Department.

²⁷³ Stein, *Towards New Towns for America*, 100.

²⁷⁴ Ibid.; Hillside Homes File, New York City Buildings Department.

²⁷⁵ Hillside Homes File, New York City Buildings Department.

Hillside matters” related to the overall site design continued to need attention.

Throughout the building process, Stein often told Aline of his frustrations with the “endless obstacles” put in Hillside’s way. One of the obstacles was the federal government’s unwillingness to approve landscape architect Marjorie Cautley’s design for the courts and other open spaces. Stein had worked with Cautley on a number of previous projects, including Sunnyside, Radburn, and Phipps. He greatly valued her approach to design and the way in which it fit with his own architectural sensibilities. While it took many meetings and even trips to Washington to finally convince Harold Ickes, head of the PWA, and others in the government of the worth of hiring Cautley, eventually Stein’s desire won out and Cautley became the designer for the site’s expansive green spaces.²⁷⁶

Stein had less success convincing decision-makers to adhere to his ideas on other aspects of the comprehensive site design. One such instance was related to the streets that were to run through the development. During the planning stage, Stein envisioned Hillside mostly free of interior roads, as had been done at Radburn, with only one street perforating the interior. The hope was that such a layout might give greater cohesion to the site and safeguard pedestrians from passing vehicles.²⁷⁷ Since Hillside was an undeveloped parcel when excavation work began, there were no actual streets running through it, just lines on a map traced there by the Bronx engineer’s office. Stein, Straus, and Eken all worked to realize this part of the design but none of them succeeded.²⁷⁸ With the city engineer unwilling to budge, even after the Mayor expressed a willingness to

²⁷⁶ Letter, Stein to Aline McMahon Stein, November 28, 1934, Clarence S. Stein Papers, Box 34, Folder 12; Letter, February 8, 1935, Clarence S. Stein Papers, Box 35, Folder 2.

²⁷⁷ Stein, *Towards New Towns for America*, 93, 95.

²⁷⁸ Straus, *The Reminiscences of Nathan Straus*, 50-51.

speak in favor of the unusual design, eventually Stein had to concede and the streets became a part of the realized site plan.²⁷⁹

The other instance in which Stein encountered trouble and had to relinquish his initial vision was with the retail stores planned for the adjacent parcel of land along Boston Post Road, which Straus still owned.²⁸⁰ Stein considered these stores a vital piece of the integrated community concept that he conceived for Hillside and wanted to oversee their composition himself, worrying that an unsympathetic design by another architect could potentially “ruin Hillside.”²⁸¹ Initially all were in agreement that Stein should be the stores’ chief designer and Starrett Brothers & Eken their builders. Reflecting the growing fractures in his relationship with both Straus and Eken by late 1934, in December Straus decided to go with another architecture firm, De Young & Moscovitz. The firm designed two one-story structures, housing a total of 27 stores, for the site.²⁸² [Figure 3.3.] While the stores proved successful from the beginning, quickly filling up with tenants even before their completion, the buildings, simple streamlined structures faced in stone,²⁸³ did not adhere to the same architectural principles as Hillside and likely did not meet Stein’s desire for a comprehensive design aesthetic.

²⁷⁹ *The Home News* “Second Hillside Housing Unit to Cost \$800,000; Will Have 359 Apartments,” April 5, 1934, Scrapbook, “March 30, 1934-July 6, 1934,” Nathan Straus Jr. Papers; Letter, Stein to Aline McMahon Stein, June 30, 1935, Clarence S. Stein Papers, Box 35, Folder 5; Stein, *Towards New Towns for America*, 95.

²⁸⁰ Letter, Stein to Aline McMahon Stein, November 17, 1934, Box 34, Folder 12.

²⁸¹ Stein, “Hillside Housing,” 2-3; Letter, Stein to Aline McMahon Stein, December 17, 1934, Clarence S. Stein Papers, Box 34, Folder 13.

²⁸² Letter, Stein to Aline McMahon Stein, December 19, 1934, Clarence S. Stein Papers, Box 34, Folder 13; *New York City North Side News*, “Real Estate Notes,” February 7, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

²⁸³ *New York Herald Tribune*, “Stores for Hillside House Tenants in the Bronx,” June 23, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

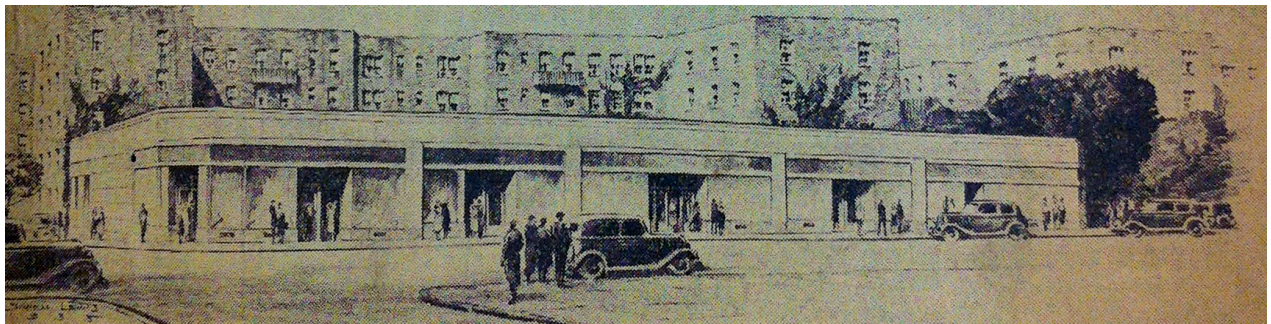


Figure 3.3. Rendering of shopping center at Hillside Homes.

The Home News, "Shopping Center for Hillside Homes Being Erected," June 23, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus, Jr. Papers.

The Building Trades at Hillside

In the midst of Hillside's backers preoccupation with disavowing accusations hurled at the project, securing building permits, making design revisions, and dealing with internal disputes, the buildings themselves underwent significant progress. The hard work of various men at the construction site and elsewhere throughout the fall and winter of 1934 and into the spring, summer, and fall of 1935 made Hillside's steady advancement possible. When Stein visited the site in late August 1934, he happily exclaimed to Aline, "Hillside is alive at last, steel and brick growing up all over the place."²⁸⁴

In these early stages ironworkers, carpenters, bricklayers, concrete layers, and various laborers helped bring Hillside to life. They worked with materials acquired and produced for the project by lumberjacks, metalworkers, quarrymen, and many others. Using information provided by the Hillside Housing Corporation, the children of P.S. 78 used pictures and figures to detail how such a large and complicated project required the skills, muscles, and ingenuity of thousands. [Figure 3.4.] For example, the students' books explained how the production of materials alone required 11 million man-hours.²⁸⁵

²⁸⁴ Letter, Stein to Aline McMahon Stein, August 21, 1934, Clarence S. Stein Papers.

²⁸⁵ *A.H.S. Record*, January 1935.

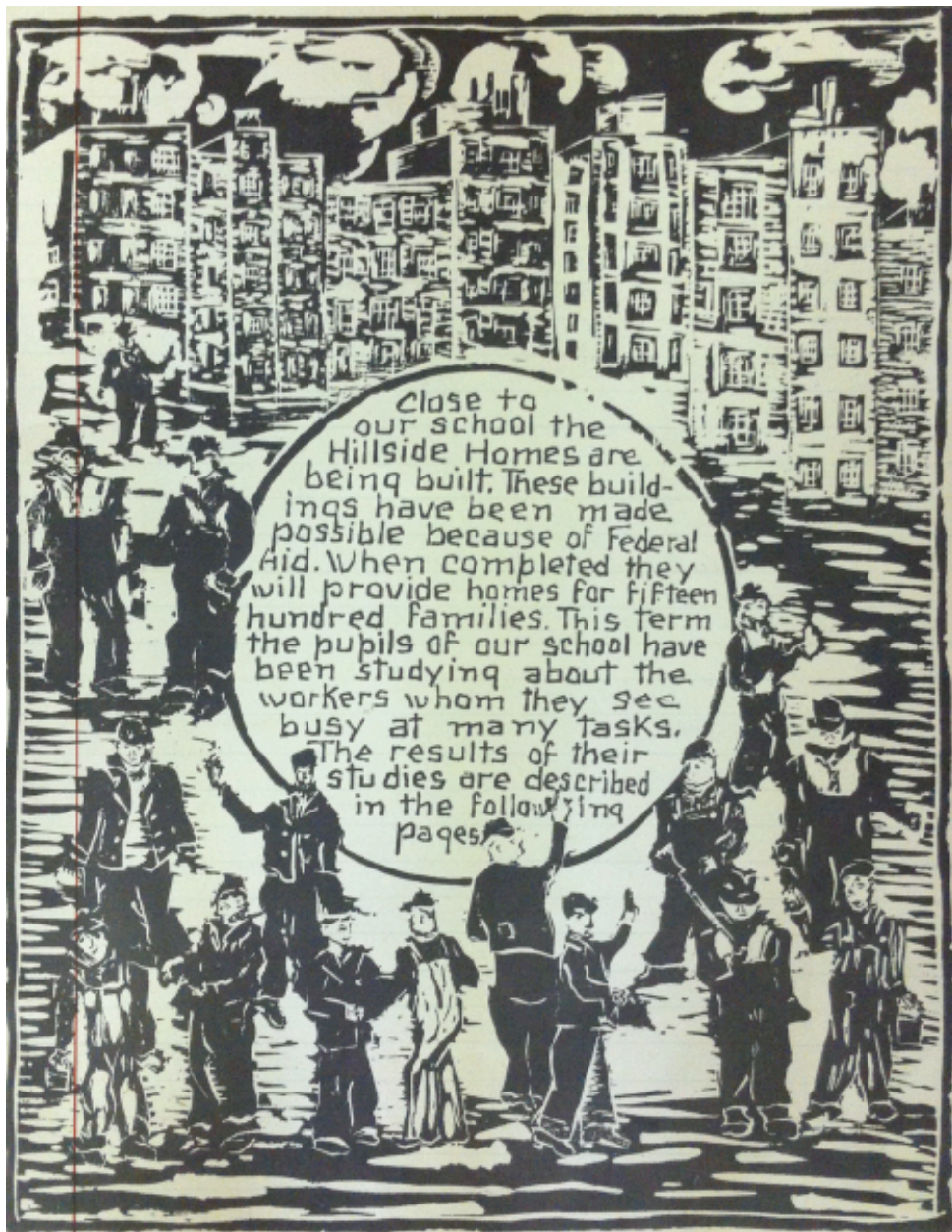


Figure 3.4. Woodcut depicting the various trades at work on Hillside.

A.H.S. Record. June 1935, P.S. 078, Anne Hutchinson School, Bronx, New York.

When the bricklayers and other trades first began their work, Stein recalled over two decades later, they were “hungry for work but out of habit.”²⁸⁶ Many had not worked regularly in two years or more. Stein remembered how at first the bricklayers:

Each laid some 750 bricks a day. But as they got the swing of the work their pace increased; and before long, they were laying 1,100 a day. It was a lovely sight to see the long line of men in rhythmic motion on the scaffolds, following the gang leaders. They seemed to draw a curtain of beautifully textured brick up from the ground toward the sky. It was good to see homes being erected once more.²⁸⁷

Approximately 250 bricklayers managed to secure work on the site, as did 400 unskilled laborers, 120 carpenters, and 70 plumbers.²⁸⁸ They were part of an average of 1,000 men employed on the site daily who gained employment through union membership. Depending upon their skill level, the workmen made anywhere from \$1.60 a day, if a laborer, to \$14.50 a day, if a skilled plasterer. The table below details the wage rates of a variety of the trades working on the site [Table 3.1].²⁸⁹ At a time when the average construction wage came in at 49 cents an hour, only the laborers, the least skilled amongst the trades, made less than that amount.²⁹⁰

²⁸⁶ Stein, *Towards New Towns for America*, 96.

²⁸⁷ *Ibid.*, 100.

²⁸⁸ *A.H.S. Record*, January 1935; *The Home News*, “Bronx Workers Are Given Square Deal, Contractor on Hillside Project Declares.”

²⁸⁹ *A.H.S. Record*, June 1935.

²⁹⁰ U.S. Department of Labor, Bureau of Labor Statistics, “100 Years of U.S. Consumer Spending: Data for the Nation, New York City, and Boston: 1934-1936,” August 3, 2006, accessed September 19, 2013, <http://www.bls.gov/opub/uscs/1934-36.pdf>.

Wages for Men Employed at Hillside	
<i>Trade</i>	<i>Pay per day</i>
Plasterer, skilled	\$14.50/day
Carpenter, skilled	\$14.25/day
Bricklayer, skilled	\$14.15/day
Lather	\$11.20/day
Steamfitter	\$11.20/day
Electrician	\$11.20/day
Plumber	\$12/day
Roofer	\$12/day
Painter	\$9/day
Tile worker	\$8.58/day
Steamfitter, helper	\$7-8/day
Carpenter, unskilled	\$6-9/day
Plasterer, unskilled	\$6-8/day
Bricklayer, unskilled	\$5-6/day
Laborer	\$1.60-\$1.80/day

Table 3.1. Wage Rates for Men Employed at Hillside.
Created by author from details provided in the *A.H.S. Record*, June 1935.

There were clear advantages to working on a government project, which stipulated that the prevailing wage be paid, and those men able to secure work at Hillside through their union affiliations were the lucky ones. Many more men hoping for work lined up outside the wire fence that surrounded the construction site. As Stein wandered around the site advising the laboring forces, he saw them, the “hundred or two hundred men pressing against the gate...Waiting from early morning to long after the 5 o’clock whistle.”²⁹¹ As Stein celebrated the laying of bricks and the “joy” of seeing the “conception” of Hillside “unfold, rise, grow, by the hand of men,” he thought all of those “petty troubles of Hillside” described above were “forgotten.”²⁹²

But even at the job site, Stein could not escape such “troubles.” They simply manifested themselves in a different form, less “petty” and starker, for the complaints that greeted Stein at the site arose out of a concern many tradesmen felt after being unable to secure work on one of the only large construction projects occurring in the city at the time. While Stein’s letters to Aline contained no discussion of the role of the unions in garnering jobs for certain trades, he did detail the accusations made by many dejected tradesmen, who believed ethnic bias was at the base of their inability to secure work.

Stein described how men of similar heritage to Vitolo and himself approached each of them on separate occasions with “endless complaints of favoritism.” According to Stein, Jewish men came to him to assert that “no Jews were being taken on” while “the Italians all get after Frank.” Stein described how he and Vitolo “tried to keep out of it.

²⁹¹ Letter, Stein to Aline McMahon Stein, August 23, 1934, Evening, Clarence S. Stein Papers, Box 34, Folder 11.

²⁹² Parsons, *The Writings of Clarence Stein*, Letter to Aline, August 24, 1934, 291.

But it is heartbreaking.”²⁹³ Though this author was not able to uncover any statistics to back up this assertion, such occurrences as that described above make clear that Hillside was not simply a project of well-built buildings and open grounds for lower-class people. Rather, its very construction represented an income source for thousands, from the lowliest bricklayer to the celebrated architect and builders.²⁹⁴

Although Hillside’s backers did comply with labor unions earlier requests to employ traditional trades on the site, some tradesmen did not manage to secure work at Hillside because their skills were not required. The stonemasons were one such group. Despite being depicted in the P.S. 78 students’ discussion of various types of tradespeople, it does not appear that stonemasons actually worked on Hillside. At the end of the April 1934 groundbreaking ceremony, a man stood up on his chair to bring Mayor LaGuardia’s attention to this matter. *The Bronx Home News*, a local paper, reported on the event, describing how the man called out, “Mr. Mayor, before you go I want to say this because I don’t think you know about it. I find that the stone masons have been left out of this project entirely and that they are entitled to work, the same as everybody else.” The Mayor, who “appeared willing to listen” was “borne away” by the pressing crowd and never made a response.²⁹⁵

While that outspoken critic believed stonemasons and their trade deserved a spot on the job site, the project’s backers, driven by budgetary constraints, were not able to

²⁹³ Letter, Stein to Aline McMahon Stein, August 23, 1934, Evening, Clarence S. Stein Papers, Box 34, Folder 11.

²⁹⁴ Letter, Stein to Aline McMahon Stein, February 21, 1934, Clarence S. Stein Papers, Box 34, Folder 7; *A.H.S. Record*, January 1935 and June 1935.

²⁹⁵ *The Home News*, “LaGuardia and Lyons Praise Hillside Housing Project at Ground-Breaking,” April 20, 1934, Scrapbook, “March 30, 1934-July 6, 1934,” Nathan Straus Jr. Papers

comply. Although the specifications presented to the building department originally called for the use of marble treads for the stairs and marble slabs for the bathroom floors, building department documents and a post-construction analysis revealed that colored cement and tile won out in the stairwells and bathrooms, respectively.²⁹⁶ In other places where stone would traditionally have been used, such as for the foundation walls or as coping along the tops of the buildings, cement, in cast or poured form, was favored instead.²⁹⁷ Indeed cement represented the largest supply order placed at Hillside.²⁹⁸ As with many of the other more modern materials utilized on the project, the preference for cement over stone was likely tied to its economy and ease of use.

Even as Hillside made use of materials that were less-labor intensive than traditional applications, Stein nevertheless celebrated the role that physical labor played in bringing his ideas to life. Many of his letters to Aline were filled with marvel at the role various trades played on the site, whether it was erecting the steel or laying the brickwork. [Figure 3.5.] On August 24th he described the scene of bricks being laid “by the hands of men—long rows of them, men not machines.” And on August 28th, he remarked, “There is such delight in seeing a building being made by hand, by craftsman. Our bricklayers are craftsman.”²⁹⁹ While Stein was a modernist in many respects, pushing for the use of novel building and site design techniques in his projects, a deep sense of humanism clearly underlay his modernist tendencies.

²⁹⁶ Hillside Homes File, New York City Buildings Department; Stein, “Hillside Housing,” *American Architect*.

²⁹⁷ Hillside Homes File, New York City Buildings Department.

²⁹⁸ *New York City Sun*, “Farley Inquiry Laid to Moses Election Talk,” February 18, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

²⁹⁹ Letter, Stein to Aline McMahon Stein, August 24 and August 28, 1934.



Figure 3.5. Tradesmen, including carpenters and masons, at work on the various units at Hillside.

The Home News, "Model Hillside Development Progressing," August 25, 1934, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus, Jr. Papers.

Hillside Rises

As summer transitioned to fall, the more significant details like the brick were ready for inclusion and Stein began to visit the site with greater frequency. He reveled in the realness and tangibility of the project as it came together before his eyes. “It is great fun, building – really building,” he told Aline, “Escape from all the theory of housing for a while.”³⁰⁰ After a particularly long day on the site, he detailed how his “legs are good and tired” from having “walked around the long walls and up the hill, following the work of one brick layer after another. Changing a pattern here, rejecting a brick there.” But despite his tiredness, he nevertheless celebrated how Hillside was finally, “growing, growing, growing.”³⁰¹ [Figure 3.6.]

Spending more time at the site allowed Stein to ensure that materials were placed in the manner called for by his specifications and to observe how his sketched-out plans arose in reality. As Stein explained to Aline, “Now is the important time as far as the appearance goes, the starting of the brick work. In spite of all the care with which drawings are made, it all has to be gone over again at the job with real bricks instead of lines. In fact, I have in some small manner changed almost every pattern in the building to fit the size of the brick.”³⁰²

³⁰⁰ Letter, Stein to Aline McMahon Stein, August 23, 1934, Morning. Clarence S. Stein Papers, Box 34, Folder 11.

³⁰¹ Letter, Stein to Aline McMahon Stein, August 23, 1934, Evening.

³⁰² Letter, Stein to Aline McMahon Stein, August 22, 1934, Clarence S. Stein Papers, Box 34, Folder 11.

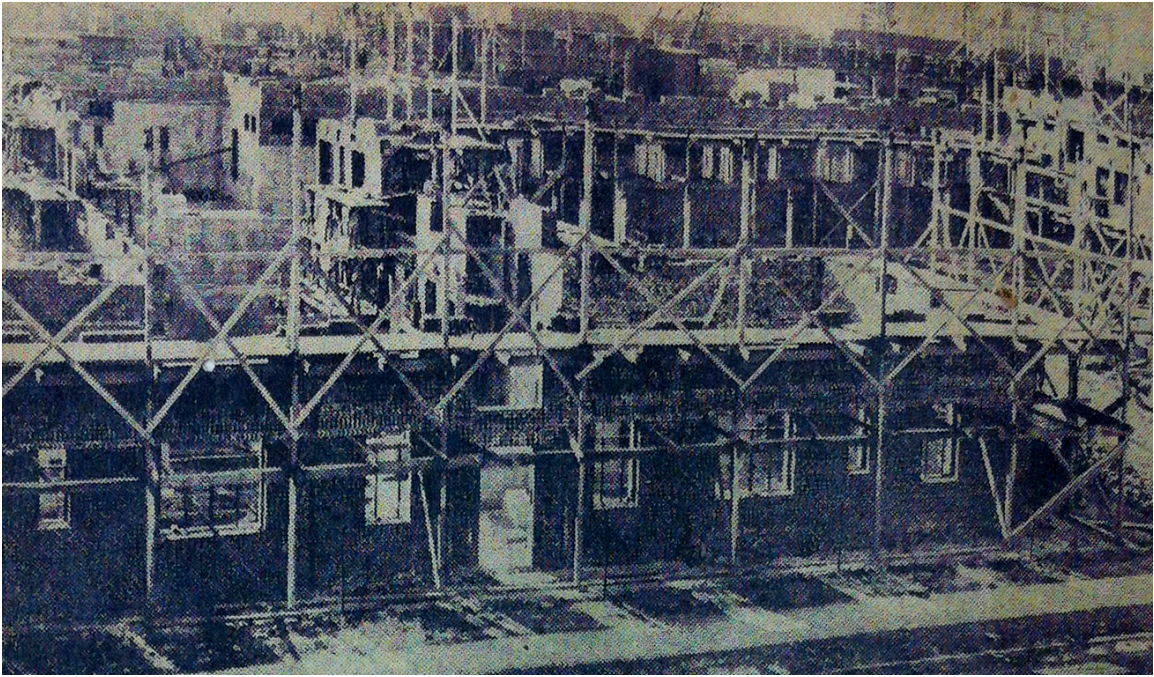


Figure 3.6. Scaffolding erected in preparation for upper floors at Hillside

The Home News, "Rapid Strides in Hillside Housing Work," October 15, 1934, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus, Jr. Papers.

So that Hillside might sprout from the site, 90 thousand barrels of cement were mixed with water, sand and gravel to make concrete for the foundations and to cover the reinforced arches that made the buildings fireproof. Fifteen train cars delivered the wire-mesh needed to reinforce the concrete.³⁰³ In turn, structural ironworkers used 8.2 million pounds of steel to erect the steel girders and columns while iron was placed at regular intervals to provide interior support. As the buildings stretched skywards, the concrete and ironworkers laid 4-inch floor slabs of short-span reinforced concrete and constructed stair towers and elevator shafts. Bricklayers followed along at a steady rate, busily laying 15 million bricks in a common bond. Scaffolding allowed the bricklayers to reach the upper stories, where they created exterior walls with a 12-inch thickness.³⁰⁴

During late August and early September bouts of rain put a temporary stop to the work and Stein worried that too much bad weather might impact long-term progress. As he confided to Aline on September 7, “We can’t afford to waste any of our precious time.”³⁰⁵ A few days later, Stein mentioned seeing a news banner rushing across *The New York Times* building announcing Straus’ resignation as state head of the NRA in order to devote more time to Hillside. Indicative of the tensions that under-lie Stein’s interactions with two of his main collaborators on the project, the other being Eken, Stein

³⁰³ *The Home News*, “Hillside Development Makes Rapid Progress,” November 18, 1934, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers; Hillside Homes File, New York City Buildings Department.

³⁰⁴ Ibid.

³⁰⁵ Letter, Stein to Aline McMahon Stein, September 7, 1934, Clarence S. Stein Papers, Box 34, Folder 12.

felt annoyed by the fact that Straus did not inform him of this the decision before moving forward.³⁰⁶

Despite the spells of cold and rainy fall days, and the simmering tensions amongst the project's primary backers, work did carry on and by early November the project was well enough along that the courts and open spaces between the buildings could be easily discerned and the landscaping work begun. By this point, 900 to 1,000 men were busy at work on the site on any given day. Glaziers began to install glass into the development's 8,739 "Fenestra" steel casement windows to keep the interior spaces free from the elements.³⁰⁷ Ninety train cars delivered these windows from the Detroit Steel Products Company factory.³⁰⁸ Carpenters and roofers soon appeared to top off the buildings with layers of lumber and slag while plumbers, steam-fitters, gas-fitters, and electricians went along the interior installing the pipes, valves, wires and other components needed to supply tenants with water, heat, and light.³⁰⁹

On November 17, after being away for the better half of a month, Stein returned to find much of the exterior work completed, remarking to Aline that the buildings "look just a little flat now because the stair towers have not yet risen above the roof."³¹⁰ [Figure 8] Stein's intense desire to be involved in the project at every step is reflected in a letter he wrote to Aline after his return. In the letter, he expresses an annoyance with both Eken

³⁰⁶ Letter, Stein to Aline McMahon Stein, September 12, 1934, Clarence S. Stein Papers, Box 34, Folder 12.

³⁰⁷ *The New York Times*, "Construction Work is Pressed on 3 Model Housing Projects."

³⁰⁸ *The Home News*, "Hillside Development Makes Rapid Progress;" *Detroit Steel Products Company*, "Fenestra: Blue Book of Steel Casement Windows," 1933, <http://archive.org>

³⁰⁹ *A.H.S. Record*, January 1935 and June 1935; Stein, "Hillside Housing," *American Architect*, 15.

³¹⁰ Letter, Stein to Aline McMahon Stein, November 17, 1934, Clarence S. Stein Papers, Box 34, Folder 12.

and Straus for having “settled things” while he was away.³¹¹ He does not elaborate on what exactly the two had settled on, but there are indications in this and other letters that Stein felt he was frequently left out of important aspects of the decision making process and that his collaborators were taking too much credit for their roles in developing Hillside.³¹²

The weather remained good through early December, allowing construction to continue at a steady pace. Stein described to Aline how, “We have had such luck. Building days almost every week day.”³¹³ Showing that hurdles still remained in the approval process, Stein went on to remark, “If the government was only as co-operative as the weather man. And they haven’t approved our sewers yet. And if it suddenly grows very cold we will be in trouble.”³¹⁴

Less than a week later, the weather did turn bleak, so much so that when Stein visited the site on December 12th there was “not a brick layer” in sight. He did see “some carpenters boarding up doors and a few frozen plumbers inside.” “If the glazers could only finish with the windows,” he remarked, “we would have some temporary heat and start work in earnest inside.” But, Stein noted, “We have no right to complain. We have had a wonderful working autumn.”³¹⁵ [Figure 3.7.]

³¹¹ Letter, Stein to Aline McMahon Stein, November 17, 1934, Clarence S. Stein Papers, Box 34, Folder 12.

³¹² Letter, Stein to Aline McMahon Stein, December 17, 1934, Clarence S. Stein Papers, Box 34, Folder 13; Letter, May 21, 1935, Clarence S. Stein Papers, Box 35, Folder 3; Letter, June 30, 1935, Clarence S. Stein Papers, Box 35, Folder 5.

³¹³ Letter, Stein to Aline McMahon Stein, December 6, 1934, Clarence S. Stein Papers, Box 34, Folder 13.

³¹⁴ Ibid.

³¹⁵ Letter, Stein to Aline McMahon Stein, December 12, 1934, Clarence S. Stein Papers, Box 34, Folder 13.

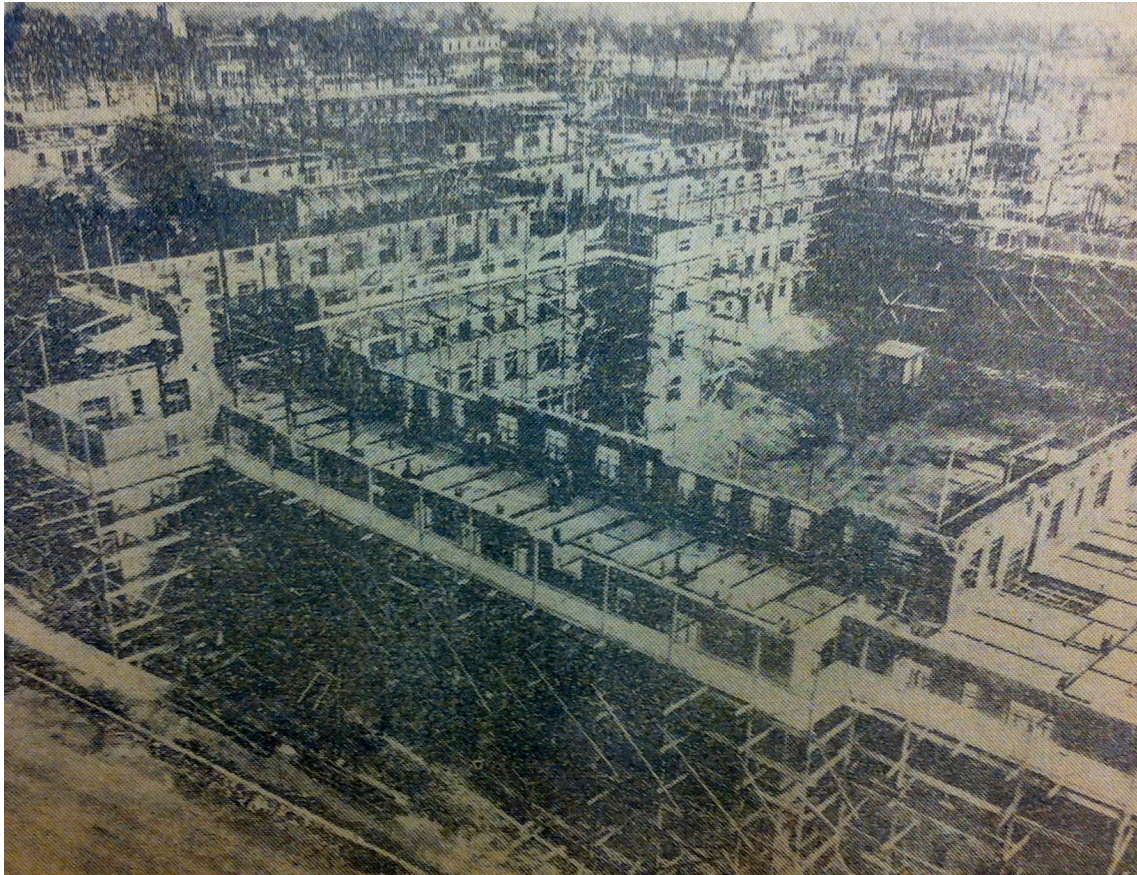


Figure 3.7. Walls rise on Hillside's units. This image shows exterior walls nearing completion on one of the four-story units.

New York City Herald Tribune, "A New Section Arises in Once Deserted Part of the Bronx," November 17, 1934, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus, Jr. Papers.

Reflecting the unpredictability that typically accompanies a year-round construction schedule, the weather continued to fluctuate over the next few months, ranging from bitter cold to dreary rain to relatively warm. By December 14, temperatures picked up so that the bricklayers could return to arranging the Denning's Point bricks on the exterior. Most of the exterior work on the three four-story units was complete by this point, "everything up to the roof," Stein remarked, "excepting the six story buildings."³¹⁶ Although rain fell on December 19, it could not hinder the development from being "almost topped out." Braving the dreary weather, Stein visited the site that day and described to Aline how, "Even the tall buildings on the crest of the hill will be practically finished externally in a few days if it does not rain or snow."³¹⁷

By early January, the exteriors of the two six-story buildings remained incomplete, with weather the most likely culprit. [Figure 3.8.] Stein's letters to Aline in January and February are decidedly less celebratory than in previous months, describing the bouts of heavy snow that slowed progress. On his visit to the site on January 12, a day when snow fell in the late afternoon, Stein described how Hillside was "slowly taking shape."³¹⁸ A similar tone marks his letter of January 24 when heavy snow hit. Stein called it "pretty near a blizzard."³¹⁹ Into early February, Stein told Aline that Hillside "moves so slowly but it moves"³²⁰

³¹⁶ Letter, Stein to Aline McMahon Stein, December 15, 1934, Clarence S. Stein Papers, Box 34, Folder 13.

³¹⁷ Letter, Stein to Aline McMahon Stein, December 19, 1934, Clarence S. Stein Papers, Box 34, Folder 13.

³¹⁸ Letter, Stein to Aline McMahon Stein, January 13, 1935, Clarence S. Stein Papers, Box 35, Folder 1.

³¹⁹ Letter, Stein to Aline McMahon Stein, January 24, 1935, Clarence S. Stein Papers, Box 35, Folder 1.

³²⁰ Letter, Stein to Aline McMahon Stein, February 8, 1935, Clarence S. Stein Papers.



Figure 3.8. Hillside Homes in early 1935, when winter weather slowed progress.
Clarence S. Stein Papers, Box 38, Folder 14.

Nearing Completion

While weather made progress sluggish, the advancements of previous months meant Hillside's completion was now in sight. A progress report written on January 7th, which was later discussed in a January 12th newspaper article, detailed the completion of all foundation work and 90 percent of the steel structural work. The roofers had finished topping off the three four-story units with flashing, five-ply felt and slag. The window installers had placed 99 percent of the steel windows and the glaziers had installed 40 percent of the glass. Much of the buildings guts, which would remain invisible to tenants but greatly add to their quality of life, were also installed by January with 90 percent of the plumping and pipes placed as well as 80 percent of the heating apparatus, radio aerals, and wiring.³²¹

A post-construction analysis, featured in the publication *American Architect*, described in more detail the form these "invisible components" took. "All house-drains, soil, waste and vent lines are of cast-iron," the article explained, while "all piping, hot and cold, is brass." Water to supply the pipes came from the city. A "two-pipe up feed, low pressure vacuum return system... steam mains... [and] radiators" formed the heating apparatus with a boiler room located in each of the five units.³²² The electrical system received careful consideration to ensure efficiency, safety, and longevity in both the private apartments and in the public spaces. Each apartment came equipped with wiring for ceiling light fixtures, less costly long-term than pull chains or cords, and multiple outlets could be found in each room. Every apartment's electric feeder had the ability to

³²¹ *Mount Vernon N.Y. Argus*, "PWA Homes Ready Soon," January 12, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers.

³²² Stein, "Hillside Housing," *American Architect*, 16.

accommodate more power than would be immediately necessary, ensuring an easier transition to the electric ranges and other newly appearing appliances many would likely purchase in the future.³²³

Soon it was time to begin the interior finishing work, covering over the pipes and electric wires with walls and floor materials that would denote the various interior spaces. Plasterers, carpenters, and various other tradesmen and laborers were brought in to install fireproofing material, walls, flooring, trim, cabinetry, and fixtures. Interior fireproofing followed contemporary techniques of the day, making use of metal and concrete to ensure safety for occupants if a fire should arise.³²⁴ All stairwells were outfitted with four-inch hollow blocks while lathers used metal, rather than wood, lath as a repository for the plaster.³²⁵ As well, near the end of construction, as the final components were placed, Kalamein doors with a one-hour fire-test rating were installed at the entrance to each apartment.³²⁶ Kalamein doors, which emerged in popularity around the turn of the 20th century and remain in use today, consist of a solid wood core covered in metal.³²⁷

Stein's letter to Aline on February 2nd explained how partitions were "just beginning to [be] put up." Though Aline wanted the two of them to go off on a vacation together, Stein thought it critical to be present as the partitioning progressed in order to "see all the various types of apartments in actuality so that I can be sure no change is

³²³ Stein, "Hillside Housing," *American Architect*, 14.

³²⁴ Donald Friedman, *Historical Building Construction: Design, Materials, and Technology* (New York: W.W. Norton, 1995), 131.

³²⁵ Stein, "Hillside Housing," *American Architect*, 15.

³²⁶ *Ibid.*

³²⁷ C.T. Richards, "Making a Metal Covered Door," *Carpentry and Building*, 31 (January 1909), Google Books; West Side Metal Door, "Kalamein Doors," accessed September 19, 2013, <http://www.westsidemetaldoor.com/Kalamien.html>.

necessary before they are duplicated again and again.”³²⁸ While Eken and Stein had overseen the construction of a life-size four-room apartment mockup during the planning stages, this was the first time that Stein would observe how the carefully arranged designs played out on a grand scale.

Finishing Work

By mid-February, interior work pushed ahead and Stein commented on how Hillside “is moving rapidly now.”³²⁹ From February to late fall, the tradespeople in charge of the interior work forged ahead, working in succession from one unit to another. After Stein and the other decision-makers gave their approval of the room layouts, carpenters finished framing out the apartments and the community spaces.

Stein’s success in devising room layouts that coincided with standard lumber sizes meant less cutting for the framing carpenters. Onto the frames, lathers nailed the metal laths. Afterward, plasterers set to their task, applying two inches of plaster for the interior walls of each apartment and five inches of plaster between apartments. In between the five-inch plaster coat went Cabot’s Quilt, a prevalent insulator of the day composed of paper and the marine plant eelgrass that was said to deaden noise and prevent air leaks.³³⁰ Living room ceilings were then finished in a rough plastered effect.³³¹

³²⁸ Letter, Stein to Aline McMahon Stein, February 2, 1935, Clarence S. Stein Papers, Box 35, Folder 2.

³²⁹ Letter, Stein to Aline McMahon Stein, February 11, 1935, Clarence S. Stein Papers, Box 35, Folder 2.

³³⁰ Seagrass. LI, “Eelgrass in History,” accessed September 19, 2013, <http://www.seagrassli.org/conservation/history.html>; *Samuel Cabot, Inc.*, “Build Warm Houses with Cabot’s Quilt,” 1928, <http://archive.org>.

³³¹ *The Herald Statesman*, “New Apartment Project is Huge Enterprise,” August 1, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

With the plaster dry, trim carpenters appeared to install pine trim around doors and at the base of rooms.³³² Pine, a relatively inexpensive hardwood commonly used in building construction even today, was likely favored for its economy and ease of use. As with the framing carpenters, the incorporation of standardized materials greatly reduced the workload for these tradesmen. The steel casement windows came pre-fabricated with hollow metal surrounds, thus eliminating the need for heavy wood trim inside the window openings.

The painters and the floor installers followed the trim carpenters. In the living rooms, dining alcoves, and bedrooms, wood blocks produced by the E.L. Bruce Company of Memphis, Tennessee “were set in cold mastic.” According to the *American Architect* article on Hillside, this flooring “eliminated [the] use of sleepers and cinder fill.” Typical hardwood floor installation, M.M. Sloan explained in 1909, required that sleepers be “laid upon the reinforced-concrete slab and filled in between with cinder concrete.”³³³ The use of wood blocks eliminated the need for that additional step.

Painted cement in the closets also meant less work for the floor installers but more for the painters. In the kitchen, “B” gauge linoleum was laid.³³⁴ Unlike in the other rooms, where the flooring preceded the installation of additional units like cabinetry and radiators, in the bathrooms, the finish flooring likely came after the installation of the fixtures. These fixtures included tubs, toilets, and sinks from American Standard, the company that Hillside investor Clarence Wooley presided over. The tubs received 4-inch

³³² Stein, “Hillside Housing,” *American Architect*, 15.

³³³ M.M. Sloan, “Industrial Applications of Reinforced Concrete,” *Engineering Magazine* 38 (October 1909 to March 1910), 728, <http://books.google.com>.

³³⁴ Stein, “Hillside Housing,” *American Architect*, 16.

tile surrounds with 6-inch tile bases along the other walls.³³⁵ Square mosaic ceramic tiles with a grade two rating were laid on the floors around the fixtures. This rating meant that the tile was ideal for rooms with “general residential traffic.”³³⁶ The grading system, based on a scale of one to five, was developed by the Porcelain Enamel Institute (PEI) in 1930 as a way to classify the durability and quality of porcelain enamel products.³³⁷

With the painting and flooring complete, it was time to install the rest of the fixtures and amenities chosen for each apartment. Bathrooms were furnished with medicine cabinets as well as a “towel bar, soap dish over [the] tub, toilet paper holder [and] ceiling type clothes dryer.”³³⁸ In the kitchen, American Standard plumbing was again utilized, this time in the form of porcelain sinks with large basins and attached drain boards. The gas console-style stoves came from the J. Rose & Company and the electric fridges were purchased from Frigidaire.³³⁹ Each kitchen included a small broom closet where cleaning products could be stored. [Figure 3.9.]

The last features to go in included ceiling fixtures, window coverings, and radiators. Bedrooms, kitchens, and bathrooms had ceiling light fixtures and one to two outlets for electrical appliances. Living rooms had an additional electrical outlet, three in total, but no ceiling fixture. Venetian blinds covered all windows in the living rooms and bedrooms.

³³⁵ Stein, “Hillside Housing,” *American Architect*, 16.

³³⁶ Ibid.; National Floor Covering Alliance, “Tile,” 2008, accessed September 19, 2013, <http://www.nationalfloorcoveringalliance.com/>.

³³⁷ Porcelain Enamel Institute, “About PEI,” accessed September 19, 2013, <http://www.porcelainenamel.com>.

³³⁸ Stein, “Hillside Housing,” *American Architect*, 16.

³³⁹ Ibid.; *The Herald Statesman*, “New Apartment Project is Huge Enterprise,” *New York City Sun*, “Homes at Hillside,” September 14, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.



A typical kitchen

Figure 3.9. Typical kitchen in a Hillside apartment.
Stein, "Hillside Housing," *American Architect*, 16, Clarence S. Stein
Papers, Box 5, Folder 41.

Radiators in the living rooms and bedrooms were of the Corto type, a radiator model produced by the American Radiator Company, the other half of American Standard, of which Wooley was head. In a 1922 promotional pamphlet the Corto is described as a “radiator classic for beauty of design, compactness in size, superiority in heating results, and minimum of circulating resistance with a maximum of strength under pressure.”³⁴⁰ In the kitchens and bathrooms, where space was at a premium, risers, rather than full-size radiators, provided heat. A central dial in each building controlled the temperatures for all of the apartments radiators, allowing the development’s engineer to ensure “sufficient” heat emerged with variations in weather conditions.³⁴¹

All of this interior work took time but by June 1, the first unit officially opened for occupancy. [Figure 3.10.] The four-story building lay north of the two-and-a half-acre playground that was Hillside’s crowning feature. With 292 apartments, this first finished unit was the development’s smallest but nevertheless came with many amenities that all tenants could utilize. The basement of newly completed unit included a community room able to accommodate 300 people, a nursery for preschool-aged children, a recreational room, and workshop spaces.

³⁴⁰ *American Radiator Company*, “Corto the Radiator Classic,” 1922, <http://archive.org>.

³⁴¹ *New York City Herald Tribune*, “Tenants Take Over Hillside Next Saturday,” May 26, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.



Figure 3.10. First completed unit at Hillside opens to tenants. This image shows how some features of Marjorie Cautley's landscape design, including bushes and trees, helped to soften the hard brick exterior of the apartment units. Art Miller for *New York City American*, June 2, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus, Jr. Papers.

A second unit, also of four stories, but with 359 apartments, was finished by late July. The completion of the final three units occurred over the course of subsequent months with work on the final unit, a six-story elevator building, concluding around October. Once finished, the development provided a total of 1,416 apartments, along with basement community spaces, a large playground, and professionally landscaped open courts.

Conclusion: Open for Occupancy

As the units opened in the summer and fall of 1935, they quickly filled with people. Model apartments were furnished, including one by the students of P.S. 78, to give prospective tenants a sense of what their own apartments could look like with furniture and mementos placed inside.³⁴² [Figure 3.11.] A recently married letter carrier and his wife were the first tenants to move into Hillside. For \$24 a month, they secured a garden-level unit with a living room, kitchen and dinette.³⁴³ From early on, newspaper sources described the desirability of these garden level units because of their affordability and easy accessibility to the outdoors.

³⁴² *New York City American*, “Housing Survey: City Authority Members Inspect Project,” May 22, 1935. Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

³⁴³ *New York City Journal*, “These Apartment-Dwellers Can Have Private Gardens, Low Rents,” May 27, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers; *The Home News*, “Hillside Called Milestone to Better Housing By Governor at Dedication,” June 30, 1935, Scrapbook, “July 7, 1934-October 19, 1934,” Nathan Straus Jr. Papers.

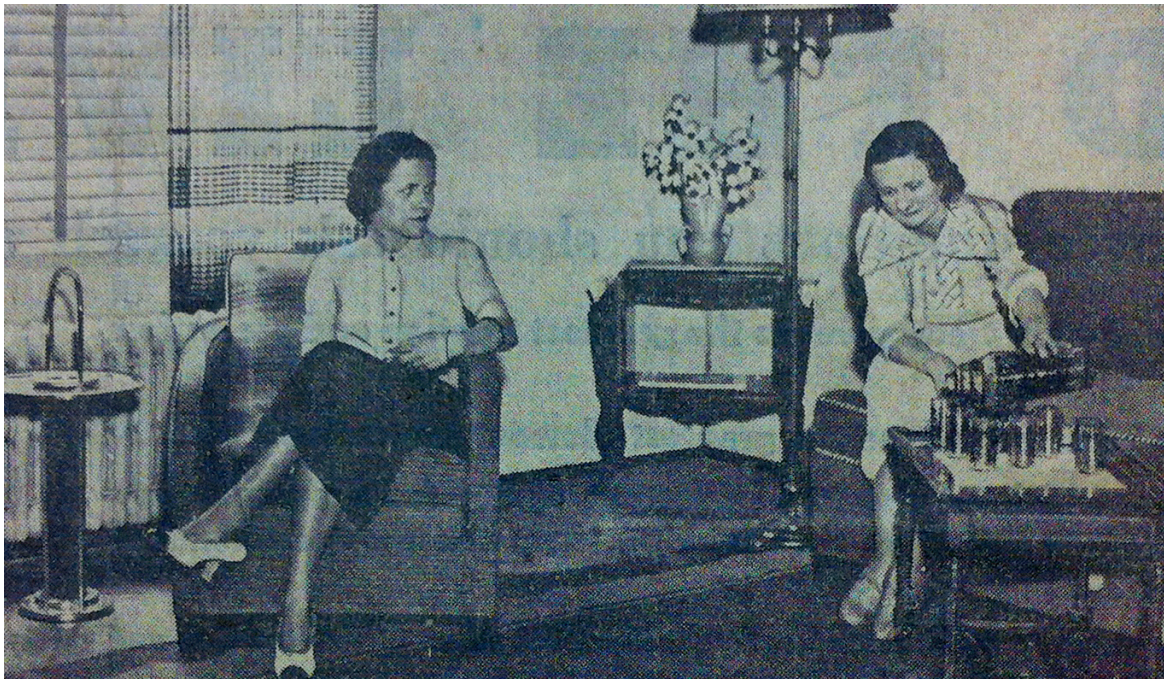


Figure 3.11. Women relax in living room of a model apartment at Hillside.

New York City Journal, "These Apartment-Dwellers Can Have Private Gardens, Low Rents, May 27, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus, Jr. Papers.

The balcony apartments on the upper levels, which carried with them a \$1 additional fee, also rented quickly while the three and four room apartments, which accounted for over 80 percent of total flats, proved the most popular.³⁴⁴

Other tenants soon followed the letter carrier and his wife. By October more than three-quarters of the apartments were rented. A survey conducted by Hillside's management a month earlier examined the backgrounds of the first 595 families to occupy the development. Four-fifths of these families came from elsewhere in the Bronx. The average income for heads of households ranged from \$1,500 to \$2,000 a year. While more than one-third of the heads of families held jobs as clerks or salesmen, others had employment in a variety of different professions, including 195 workmen and artisans and 97 civil service employees.³⁴⁵ It is possible, but there are no records to indicate, that some of the 195 workmen or artisans living at Hillside by October 1935 had played a part in the development's actual construction.

On Stein's visit to the site in early June, shortly after the first tenants arrived, he described how Hillside "looks better and better--and what crowds." By the time of the dedication ceremony in late June, a journalist noted that the first unit "was virtually 100 percent rented."³⁴⁶ Thousands attended the dedication ceremony, held on June 29, 1935, including the 177 families living at Hillside by that point.³⁴⁷ Governor Lehman presided

³⁴⁴ *New York City Journal*, "These Apartment-Dwellers Can Have Private Gardens, Low Rents," May 27, 1935; *New York City Sun*, "Homes at Hillside: Three and Four Room Suites Most Popular," September 14, 1935; Stein, "Hillside Housing."

³⁴⁵ *New York World-Telegram*, "Suites 75% Rented at Hillside Homes," September 9, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers.

³⁴⁶ *New York World-Telegram*, "Hillside Homes to be Dedicated this Afternoon," June 29, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers.

³⁴⁷ News accounts of the ceremony differ on the exact number of people in attendance, with a range of 5,000 to 7,000 provided. *The Home News*, "7,000 Hear Governor Praise

over the day's events and many well-known men appeared, including Hillside investor Clarence Wooley and General Electric Company president Gerard Swope. [Figure 3.12.] PWA Administrator Ickes and Senator Wagner both sent their congratulations while Mayor LaGuardia came but arrived late. While Lehman and the other speakers praised Hillside for signaling a viable alternative to slum living, in his speech Straus acknowledged that much still had to be done in the way of providing housing for the truly needy who "cannot afford even these moderate rentals."³⁴⁸

Stein described the ceremony to Aline as a "fool affair." He was annoyed that those who truly deserved credit, including Frank Vitolo and Jack Brower, superintendent of construction for Starrett Bros & Eken, "stood in the background" while "a lot of nonentities, who had nothing to do with the long battle that made Hillside possible, ma[de] themselves as prominent as possible."³⁴⁹ However, shortly after this event, Stein fulfilled his own prophesy that with the completion of a project, the months or years of difficulties and indecisions, of fights and annoyances "melted away" and one was left to glorify the finished product.

Project," June 30, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers; *New York City Herald Tribune*, "Lehman Lauds Hillside Homes at Dedication," Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus Jr. Papers.

³⁴⁸ *The Home News*, "Hillside Called Milestone to Better Housing By Governor at Dedication."

³⁴⁹ Letter, Stein to Aline McMahon Stein, June 30, 1935, Clarence S. Stein Papers, Box 35, Folder 5.



Figure 3.12. Crowds gather at the dedication ceremony for Hillside Homes. The ceremony took place in the play yard at the center of the development.
Home News "Lehman Dedicates PWA Model Housing," June 30, 1935, Scrapbook, "July 7, 1934-October 19, 1934," Nathan Straus, Jr. Papers.

"When I see the old folks sunning on the terraces of Hillside," Stein told Aline on July 27, 1935, "the children splashing in the wading pools and the broad sunny spaciousness of it all I say, 'that is it, it is apparent.' And I forget the periods of indecisions, of agony in choosing among the many possibilities..."³⁵⁰ Though he was speaking specifically to indecisions that swirled around the composition of the buildings, Stein's reflective prose alludes more broadly to a willingness to clear his memory of the project's many difficulties once the end arrived and he could see the buildings happily in use, just as he had envisioned they would be back in 1933 when Hillside was merely a concept in his imagination. [Figure 3.13.]

³⁵⁰ Letter, Stein to Aline McMahon Stein, July 27, 1935, Clarence S. Stein Papers, Box 35, Folder 7.



Figure 3.13. A child stands looking east towards the completed Hillside Homes and its central play yard in 1935. Clarence S. Stein Papers, Box 2, Folder 12.

CONCLUSION

Hillside's completion in late 1935 represented the culmination of a vision. After almost two decades of speaking and writing on the subject, Stein had finally managed to garner significant government financing and enough public support to allow for the construction of a lower-income housing project that provided quality living at an affordable price. As the events detailed in the chapters above indicate, the road to get there was not an easy one. Criticism and controversy abounded during both the planning and construction phases. The end result was a satisfactory one that Stein and the other project instigators could look back on with pride, even if all of the original goals were not completely met.

Although Stein and Eken originally hoped that Hillside might act as a model, showing how to successfully achieve publicly sponsored housing economically through the incorporation of experimental construction techniques, they found the established methods and materials of building winning out when it came to actually constructing the units. Not only were the traditional methods often cheaper but they also came with a built-in guarantee for being well known and reputable.

As a project already pushing the envelope in terms of an acceptable location and an appropriate design for a federally subsidized housing development, Hillside's developers had to carefully toe the line when it came to radical experimentation. The result was that, in its visible style and materiality, Hillside was rather traditional with brick cladding and iron balconies. It was the way in which Stein applied the materials that made Hillside appear more modern. Other more novel architectural touches were either hidden from the viewer's eye, such as the units steel and concrete support system and

standardized lumber framing, or played a subordinate role in the overall design, like the steel framed windows and poured concrete foundations and cornice coping.

The result leads one to wonder just how different Hillside may have looked had Stein pushed for more experimental materials and methods. There certainly were barriers, like client-preferences, excessive costs, and local building trades opposition, which hindered radical experimentation at Hillside. With the primary aims of quality, endurance, and economy, however, Stein's decision to play it safe at Hillside reflected his own desire to build for permanency through the predominant use of traditional materials.

While architecturally Hillside remained tied to traditional paradigms, the project's form and site design embraced more novel construction methods like large-scale production, the acquisition of standardized materials in bulk, and a year-round building timeline. By 1935, these techniques had acquired clout and support. All had been utilized on Stein's previous projects and by many other architects and builders as well, including the federal government during World War I. The appeal of such methods for the government was their proven worth as efficient and cost effective means of building. In the end, it was these planning practices that made Hillside stand out. Rather than radical experimentality, it was Hillside's immense scale, the incorporation of vast swaths of open land, and the architect and builder's keen attention to detail that made it distinct from a scholarly perspective.

The small luxuries provided at Hillside, such as sizable living rooms, bedrooms, and kitchens; good ventilation, and sufficient light were features typically reserved for

higher priced units of the day.³⁵¹ Other elements that Stein pushed for, like the basement community rooms, large central playground, and landscaped grounds, were highly unusual for any apartment complex in an urban environment at the time, a fact that remains true today. Such amenities are what made Hillside an incredibly appealing place to live for people of any means. Unfortunately, these very extravagances are what caused Hillside to be more expensive than it would have otherwise been and made it out of reach for those at the lower end of the income scale.

Even with the re-involvement of the federal government into housing during the Great Depression, Stein's and his fellow housing advocates vision of truly low-cost housing for the poorest members of society never materialized on a grand-scale, stifled by many factors, including Stein's unwillingness to cut corners. As well, though building may have been cheaper than during the Roaring Twenties, the costs for labor, materials, and land still were not low enough to make such a development truly affordable. Try as they might, Stein and Eken were not able to reduce costs sufficiently at Hillside to make the development a viable housing option for most members of the working class.

Speaking to reporters in late May 1935, just as the first unit neared completion, Charles Keegan, general manager of Hillside, declared that Hillside had been built to last for a century or more.³⁵² It was to be long-lasting indicator of what could be achieved when public and private entities worked together to achieve a common good. This thesis has been an attempt to ensure that the story behind the development endures at least as

³⁵¹ *The Sun*, Hillside Project Nears Completion, May 21, 1935, Scrapbook, "July 7, 1934-October 9, 1934." Nathan Straus, Jr. Papers.

³⁵² Lohman, "Speaking of Real Estate," *New York City American*, May 22, 1935; *New York City Herald Tribune*, "Tenants Take Over Hillside Next Saturday," May 26, 1935, Scrapbook, "July 7, 1934-October 9, 1934." Nathan Straus, Jr. Papers.

long as the buildings themselves. Analyzing the project from a variety of vantage points and discussing contemporary events as they related to the site has set the development within a broader framework. No building, or grouping of buildings, is an island after all. Rather, every project big or small, urban or rural, private or public reflects the mindsets of those who built it and the particular social and economic milieu in which it was constructed.

It is hoped that readers, whether they are novices or experts to Stein's body of work, have gained a better understanding of all the factors that went into Hillside's planning and construction such as what influenced Stein to employ particular planning techniques, why certain materials were used, and who was engaged at the construction site. As a federally funded project constructed during the height of the Great Depression, Hillside also represents broader themes and it is hoped that readers interested in such topics as historical housing trends, the evolution of housing policy, and the advancement of architectural techniques and tradesmen's workmanship in the United States have found the subject matter useful. This thesis is certainly not the last word on any of these subjects, however. There is still information yet to be unearthed and explored.

As a thesis written by a student of historic preservation, there is a strong desire that the information included in this paper may one day contribute to Hillside's nomination to the National Register of Historic Places, a compilation of sites located throughout the country that are federally recognized as significant and worthy of preservation. Currently, five housing projects that Stein worked on individually or as a consultant are listed on the National Register as Historic Landmarks while one is listed as a National Register District. The recognized properties include all of Stein's other New

York City area developments, Sunnyside Gardens, Phipps Garden Apartments, and Radburn in New Jersey.³⁵³ There is no reason that Hillside should not also be included on the National Register. Hillside's association with prominent designers, builders, and politicians; its embodiment of a distinct period in time; and its notable architectural characteristics make it potentially eligible under National Register Criterion A, B, and C.³⁵⁴

As noted above, Hillside was one of three PWA projects constructed in New York City in the first part of the 1930s. More research is needed to more accurately determine how Hillside compares to these two PWA projects, Boulevard Gardens and Knickerbocker Village, as well as its relation to any other privately funded projects than underway. This research could be used to clarify what aspects of Hillside's design make it particularly notable and worthy of preservation. More information on materials, manpower, and techniques, utilized both at Hillside and at these contemporary developments, would help to paint an even clearer picture of why Hillside took shape as it did. Broadening the focus to include more concurrent projects in New York City may clarify what alternatives were available to Stein and his fellow developers that they did not take advantage of as well as what construction alternatives may have only become available only in the years after Hillside's completion.

With the passing of time, details become less visible and more difficult to expose. The lack of a broader swath of primary source materials from more people personally

³⁵³ Landmarks Watch, "Clarence Stein and Henry Wright's Garden Cities," accessed December 17, 2013, <http://www.landmarkwatch.org>.

³⁵⁴ U.S. Department of the Interior, National Park Service, "National Register Bulletin: How to Apply the National Register Criteria for Evaluation," accessed December 17, 2013, http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm.

involved with the project was one of the main limitations to this thesis. There is the possibility that others tied to the project kept a correspondence much like that exchanged between Stein and his wife. As this author found in undertaking the research, such intimate letters can tell a different part of the story than can be found in any newspaper or scholarly account. In particular, it would be useful to study the writings, if they exist, of Vitolo or others continually present at the building site during construction.

A topic this author believes could prove worthwhile for fuller analysis in its own right is a more in-depth review of the books produced by the children of P.S. 78. Of particular interest might be a fuller understanding of who developed this research project for the students and what inspired the project's instigator to incorporate Hillside as a lesson plan in the children's curriculum. A question that arises in line with this is what types of trends were then emerging in the educational system that resulted in the development of this type of subject matter for elementary-aged students.³⁵⁵

The above are just some of the many possibilities that await future investigators of Hillside and its related themes. Just as buildings and man-made environments evolve over time, it is hoped that Hillside's story, and the story of Great Depression-era housing developments, will also grow and shift to encompass a greater number of facts and details. After all, no building, no story is ever static.

³⁵⁵ The author would like to extend thanks to Dr. Michael Tomlan for pointing out the potential research possibilities that might exist if further study is undertaken on the P.S. 78 Hillside books and their production.

APPENDIX A

Construction Timeline

January 1934 – Excavation of site begins

February 1934 – Ownership of site transferred from Straus to Hillside Housing Corp.

March 6, 1934 - Plans for first unit between Wilson and Fish submitted to Building Dept.

March 22, 1934 – PWA contract filed

March 31, 1934 – PWA contract signed

April 4, 1934 – Construction offices for contractors and sub-contractors completed; Plans for second unit between Fish and Seymour submitted to Building Dept.

April 19, 1934 – Official groundbreaking ceremony

May 4, 1934 – Plans for 6-story unit between Eastchester and Corsa Avenue filed with Building Dept.

May 11, 1934 – Work commences on first unit between Wilson and Fish

June 14, 1934 – Work commences on unit between Seymour and Fenton

July 26, 1934 – Bricks approved

August-September 1934 – Foundations complete, begin to erect steel and lay bricks

October 17, 1934 – Robert Moses levies charges against Hillside affiliates

January 12, 1935 – Roofs completed on 3 units, steel window work 99% finished, glass work 40% finished; plumbing, pipes, stairways 90% complete, 80% of heating apparatus installed, all foundation work complete, steel structural work 90% complete

March 4, 1935 – A.E. Kazan appointed head of Hillside Housing Corp.

April and May – Landscape work on interior courts begun

May 29, 1935 – Work complete on unit begun on May 11, 1934 bet. Wilson and Fish

June 1, 1935 – First unit opens for occupancy

June 1935 –Construction begins on shops located on Straus' land adjacent to Hillside site

June 29, 1935 – Dedication ceremony

July 22, 1935 – Work complete on unit begun on June 14, 1934, bet. Seymour and Fenton

September 1935 – Last units near completion

October 1935 – Final unit opens for occupancy

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