

Exploring Elevation

St. Louis, Missouri

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In 1982, a housing competition was held which, because of the number of similar units required, provided a good opportunity to explore the organization and refinement of building elevations. The competition, sponsored by the Lafayette Square Restoration Committee Inc., was for a site in the historic Lafayette Square District of St. Louis. The existing houses in the district were constructed during the mid-nineteenth century. Their massing, facade composition, and details were used as models for the solution.

The program stipulated 90-110 housing units of 900-1,350 square feet each. The units, depending on their size, were to contain two or three bedrooms and one, one and a half, or two and a half baths. The clientele was projected to be young professionals (single, married or with young families) or older couples moving back into the city from the suburbs.

The site is a series of continuous lots which extend north from the northwest corner of Lafayette Park. The area surrounding the site is deteriorating in spite of a general revitalization of the district. The difference between the condition of this quadrant and the remainder of the district can be attributed in part to topography and neighboring activities. There is a major downward slope beginning about

200 feet north of the square. The square itself seems to turn its back on this quadrant by rising sharply from the street to a height of almost 20 feet before leveling off, while it has more or less direct grade access from the other fronting blocks.

The northern edge of the site abuts light industry, while the western edge contains several small non-retail commercial buildings. On the eastern edge of the site there is a major change of grade and the backs of much larger houses which front a private street, Benton Place. The southern edge is marked by a major road adjacent to the square.

In addition to the topographic and border problems, the site is crisscrossed by several streets which lead to the adjacent commercial and industrial areas. The Lafayette Square Restoration Committee has had most of these streets closed in an effort to contain the district. One street, however, must continue to carry traffic into the industrial area. This street is adjacent to a number of the lots included in the competition site.

Site Organization

The primary intention of this solution is to provide a focus for the site and a link to the park. This objective is accomplished by introducing a new street and cres-

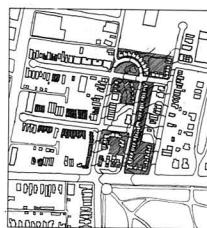
LAFAYETTE PLACE & CRESCENT LAFAYETTE SQUARE DESIGN COMPETITION ST. LOUIS MO



LAFAYETTE SQUARE



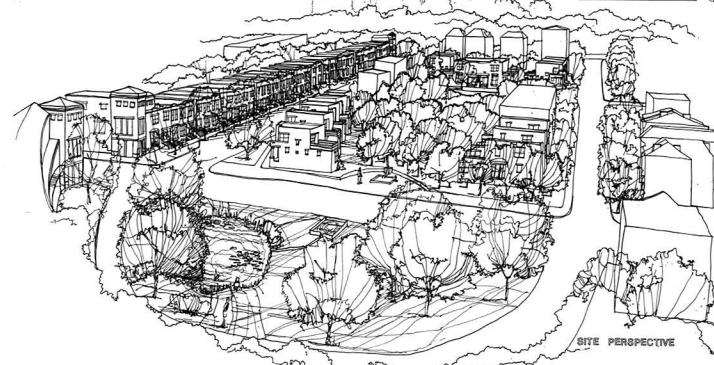
NORTHWEST QUADRANT - EXISTING



NORTHWEST QUADRANT - FUTURE



SITE PLAN



SITE PERSPECTIVE

cent which connects with Missouri Avenue at the north end of the site, thereby enclosing a new open space. The slope of the site is leveled to provide an easy

visual link from deep in the site to Lafayette Park. The crescent which closes the north end of the new open space also provides an opportunity to modify Missouri



Avenue and cut off views to the industrial area.

The majority of the new houses are in or around the new open

space. Two-story units form the eastern edge of the space, while three-story units provide additional enclosure for the crescent at the lower (north) end of the

site. Several new units are added to the existing buildings in the central space in order to satisfy the programmatic requirement. However, the central space is oc-

cupied primarily by common facilities such as playgrounds, fountains, trees, and a stream and pond.

Unit Organization

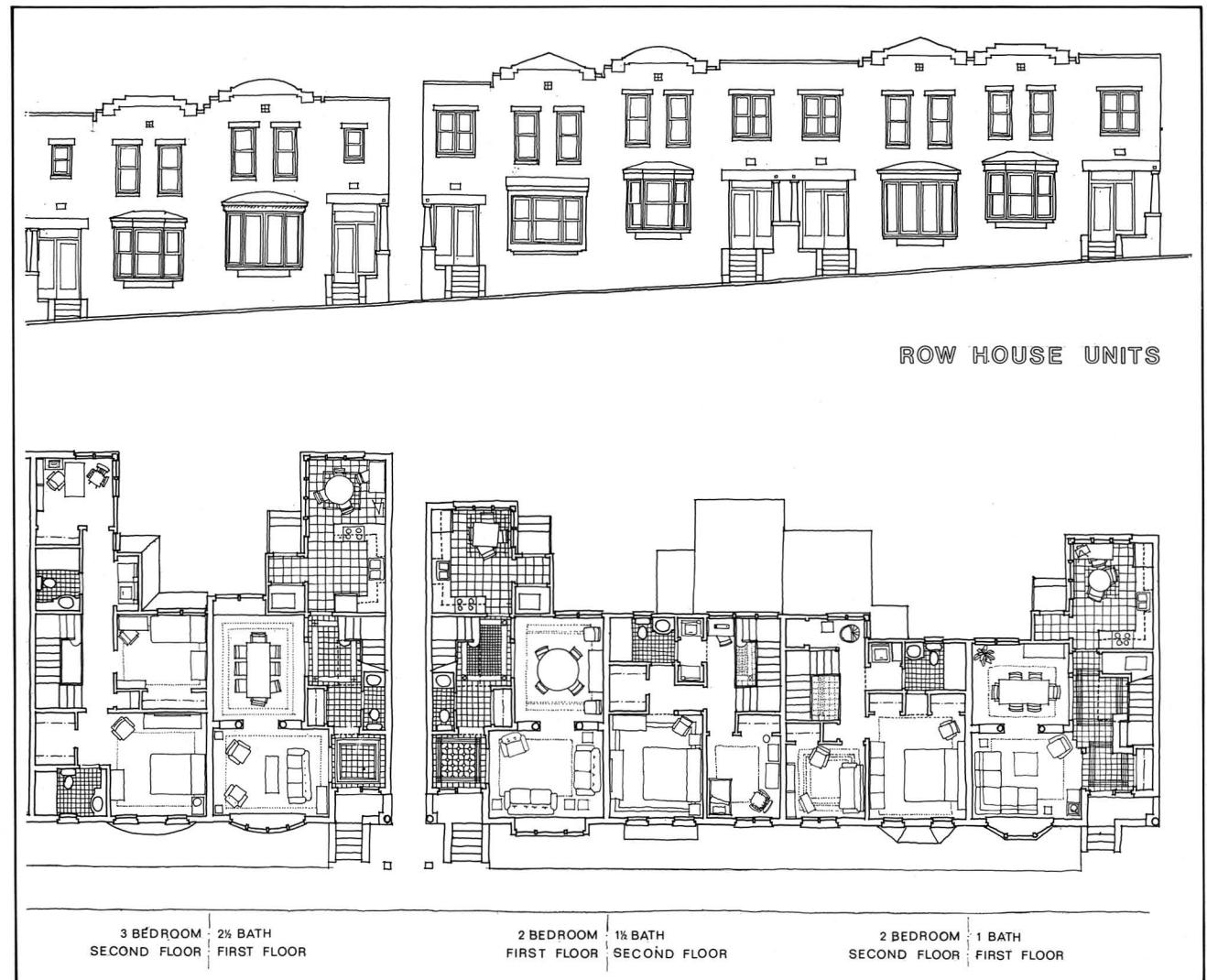
The units all respond to a single set of criteria. They contain two clusters of rooms: one with a living room, dining room, and entry, the other with bedrooms and baths. These two clusters are connected near the kitchen. All units have circulation spaces parallel to the main rooms so that members of the household can move freely without interrupting activities in adjoining areas. Each room is designed as a complete space so that it can be finished and decorated independently of neighboring rooms. The main rooms also have large openings between them to increase their sense of spaciousness.

All units contain both front and back outdoor areas. The front areas allow occupants to individualize their units with plantings, while the back yard can be used as children's play space or garden.

Row House Units

The prototypical house unit for the site is the two-bedroom, one and a half bath, row house design which fronts the new open space. This unit is modified for the larger and smaller row house units and for the freestanding central units. Based on the model of the existing houses, the elevation of the prototype and its variations contain major openings and entries on the ground floor, repeated openings on the second floor and ornamental cornices at the roof.

The elevations of the row houses are aligned to form a continuous brick wall plane for the length of the new street. Interruptions occur in the wall every fourth unit to provide access walks into the back yards. These interruptions are visually closed by pairs of recessed porches which bracket the walkways. A second interruption occurs at the center of the

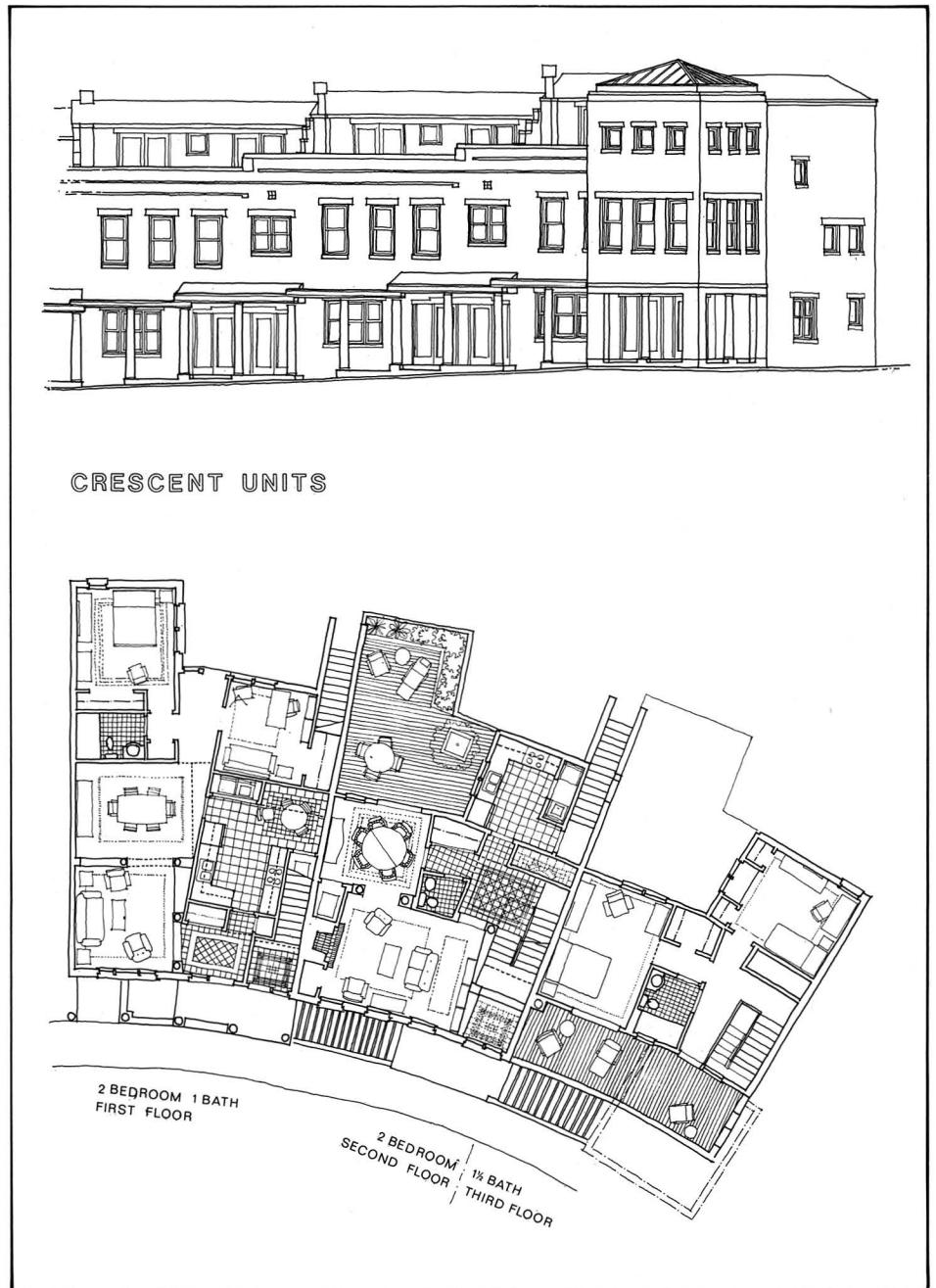
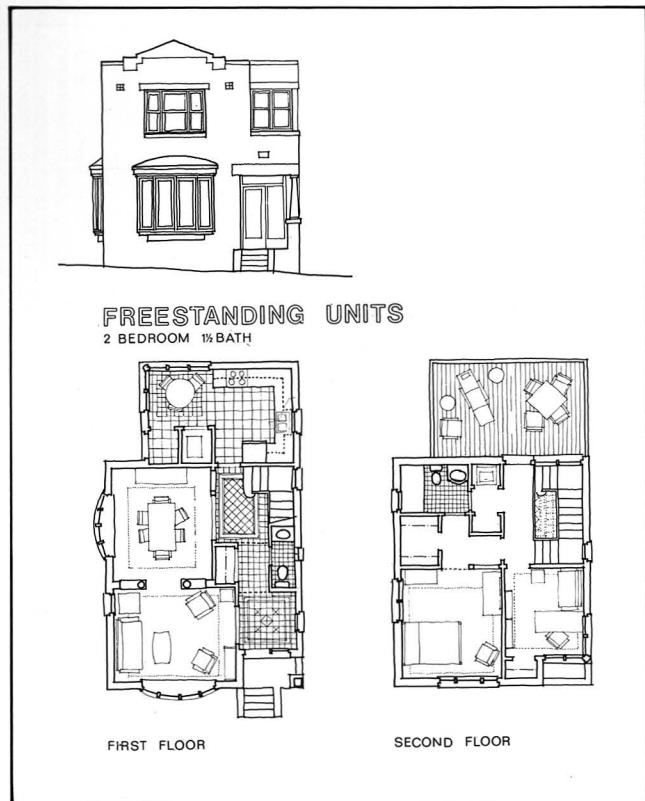


wall in response to an existing cross street. The units in this zone are stepped back from the street in intervals equal to the porch depth. Thus aligning the rear plane of the porch with the front of the adjacent unit allows an apparent overlap to occur which reduces the impact of the step back and enhances a sense of planar continuity.

The elevations of individual units provide the means for adjusting the scale of the wall to

pedestrians. At the ground level, the wall is scaled down by introducing recessed porches and projecting windows on each unit. These two elements provide a means for identifying and differentiating units. The recessed porches may be personalized by owners, while the projecting windows (which consist of a random distribution of bow, bay, and box forms) are integral to the design. The windows on the second floor are positioned so that they appear as groups rather than as in-

dividual openings. The two windows in the master bedroom are placed close together and on axis with the symmetrical living room window. These elements are also aligned with the parapet. The third window on the second floor is placed close to its counterpart on the adjacent unit. These two windows are centered over the paired porches and bracketed by a parapet above. The window composition allows two adjacent units to be expressed as three sub-units, either twelve- or sixteen-



feet wide. The parapet also provides an opportunity to conceal the two- to four-foot change in floor levels between units which is required by the sloping site.

Freestanding Units

The number of units stipulated in the program requires some units to be placed within the open space. In order to reduce their conspicuousness, the two-bedroom prototype is freestan-

ding and is smaller in scale. Thus the units frame, rather than block, views to the stream in their back yards. The prototype was slightly modified in plan to allow light into the sides and to reduce its depth. The freestanding houses are repeated to help reinforce their independence. They are also stepped away from the road to further this effect and to increase the view into the crescent from the entrance to the site.

The main elevation of the freestanding units has axially aligned living room and master bedroom windows and a parapet to establish the focus. Near the entrance porch, the casual erosion of the unit and a recessed second floor corner help to narrow the elevation and reduce its formality. The porch and second floor windows continue around the corner of the unit to soften the side elevation as well. This side elevation is unified by four windows, two at the stair landings

and one in the entrance hall, which are visually connected by the introduction of the fourth a glass block window in the lavatory on the first floor.

Crescent Unit

To provide additional enclosure at the lower, north end of the site, as well as to provide the number of units required by the program, some units are stacked. By designing a one-story ground

floor unit with a two-story upper unit, no unit is more than one story above grade. Furthermore, the difference in floor areas between the two units leaves an area which can be used as a deck for the upper unit.

The unit elevations around the crescent contain a set of elements similar to those used in the row houses. In this case, however, the elements are organized to unify adjacent elevations rather than distinguish subsets. A pattern of equally spaced columns supporting porch roofs and shading devices provides a continuous colonnade along the ground floor, while equally spaced windows, horizontal bandings, and a smooth parapet carry that idea of continuity through the upper floors. By projecting the colonnade in front of the main crescent wall, a foil is established to reduce the wall's scale and define small garden spaces for the owners.

By treating the third floor as an attic set back from the main plane of the crescent, the two-story lower floor is visually linked through height and materials with the row houses. This relationship is maintained across an interrupting cross street by the introduction of a pair of three-story square towers on the corner units. The towers also establish a gateway marking the entrance to the new open space from the adjacent area.

MacKay Avenue Units

The stacking of a two-story unit on top of a one-story unit is also used for lots fronting on MacKay, a parallel street to the east. Existing houses on this street are freestanding, two- and three-stories tall, with very narrow street facades. In order to accommodate this pattern, an L-shaped floor plan is created with a bedroom wing to the side. The

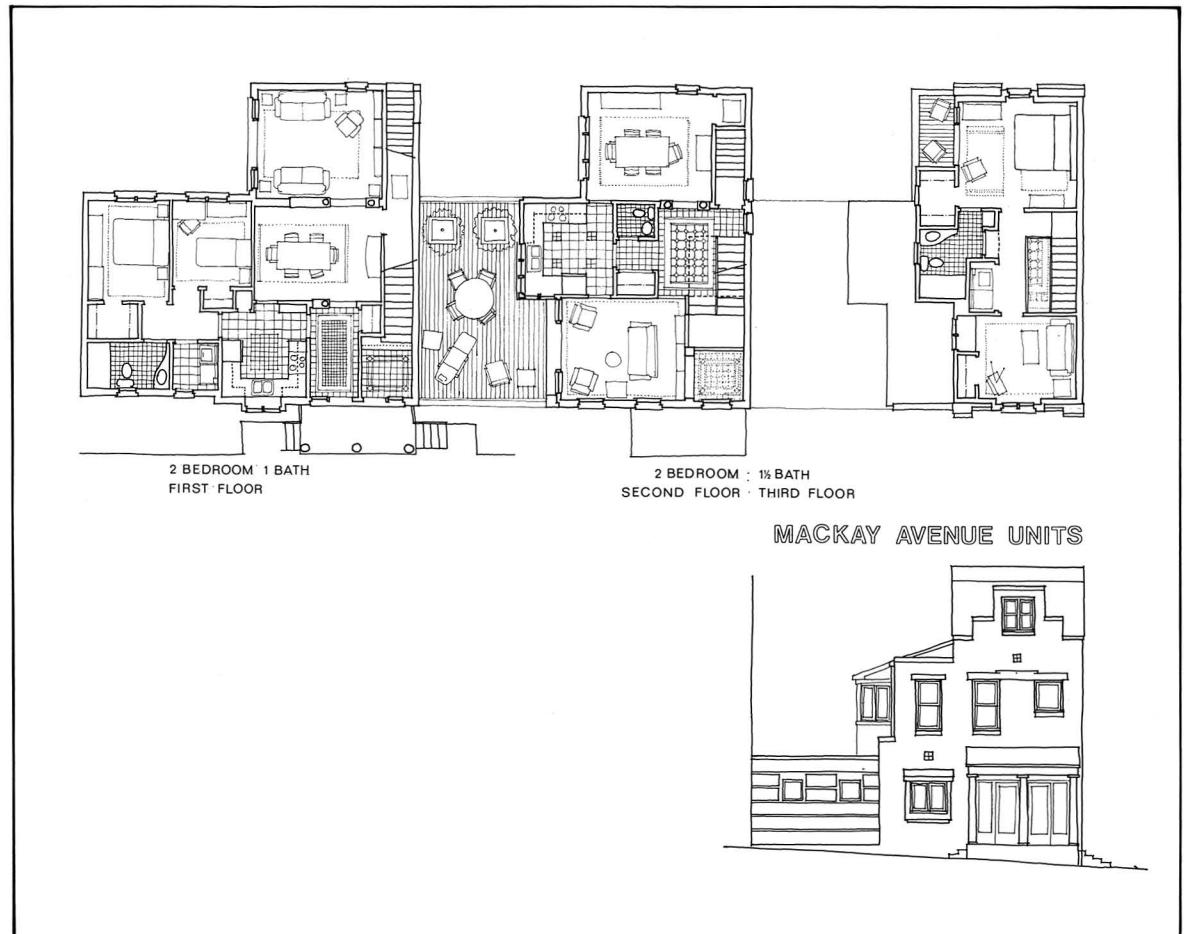
two-story upper unit is similar to those on the crescent, with an outdoor deck on the bedroom wing roof. This one-story wing is minimized by reducing the number and size of its openings and by treating its exterior surface as a garden wall. The entrances to the pair of stacked units are placed close together and framed by a small projecting porch. This porch is centered under the second floor windows and an implied dormer on the third floor. This stack of elements emphasizes the three-story section which echoes the mass of the nearby houses.

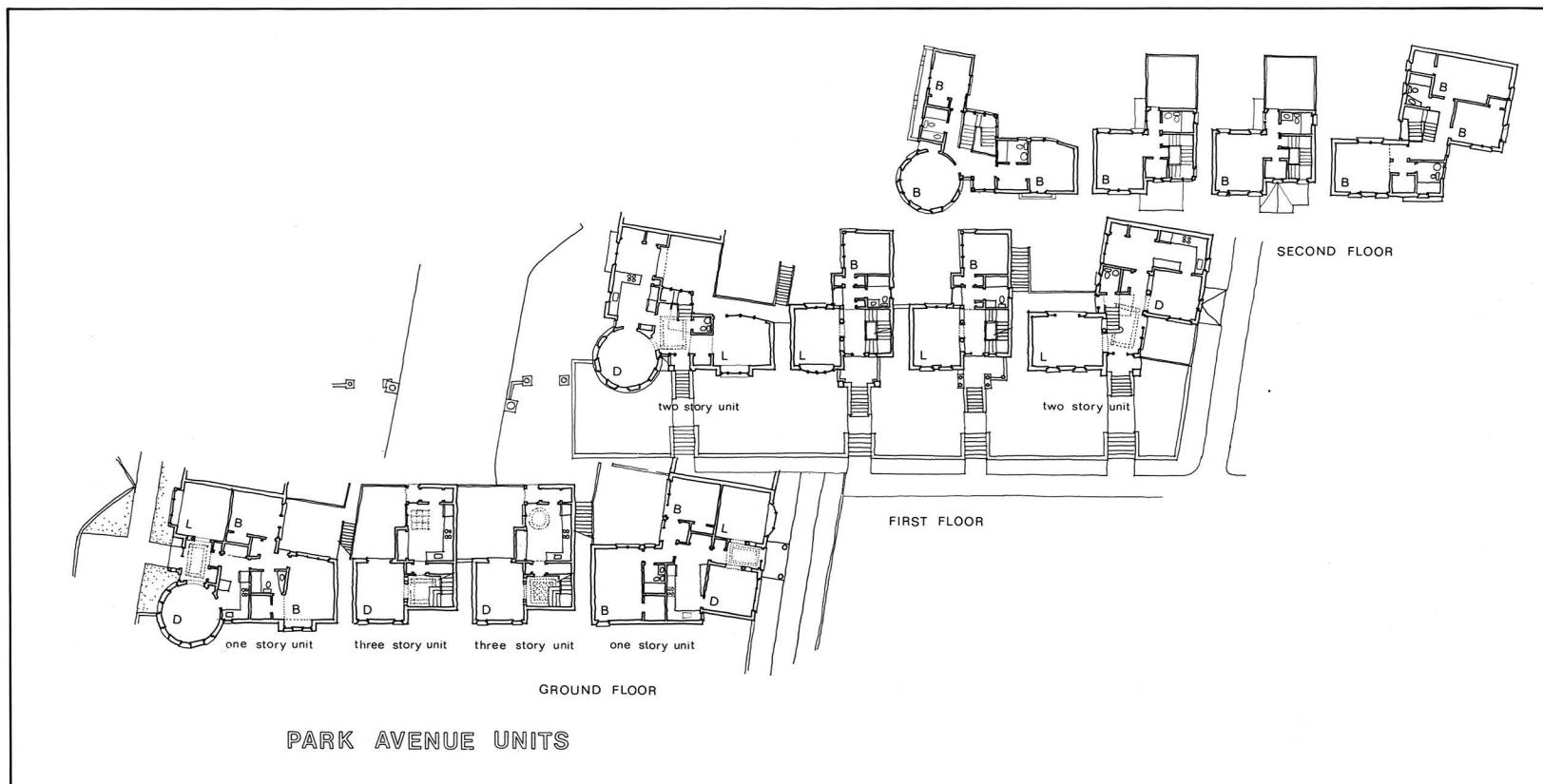
Special Units

Four units which front Park Avenue require special treatment because of their location. The existing houses facing the park are large in scale and have prominent entrances. The two new corner units are modifications of the three-story type. The one-story lower unit is entered from the side street, while a change in grade allows direct access into the first floor of the upper unit on the park side. The park facades are treated as large two-story houses with rusticated bases, while the side street elevations are similar to their adjacent units. The units have significantly different contextual relationships

with their respective side streets. The unit at the corner of the new open space marks it as entrance by the introduction of a three-story round tower. The unit on the other corner minimizes that location by turning the corner with an outdoor deck.

The two center units are the only three-story single units on the site. The lowest level contains the kitchen and dining room and has full access to the rear yard. The entrance floor contains the living room, bath, and a second room, which functions as a den or guest bedroom. The third floor contains the master bedroom suite and a roof deck.





The elevations are all developed with axial grouping of windows and special roof treatments. Porches are attached and composed of oversized elements to help enlarge the scale of the facade so that it is more compatible with those of the other houses along the park.

Conclusion

Each site condition contains units which satisfy the basic programmatic requirements and unit

organization criteria. The elevations differ in response to the contextual circumstances in which they were placed. Working to produce these differences exposed ideas about how an elevation could be manipulated.

Based on the experience with these buildings, three stages of elevation development exist. The first is the basic manipulation of plan and volume when the units are exaggerated, separated or reduced. The highly constrained site and program limited the

variations which were possible at this stage.

The second stage consisted of the arranging and shaping the required elements in each unit. Proximity seemed to be the most powerful compositional tool, while symmetry and the visual grouping of elements were the next most powerful. This stage also included refinement of the building's silhouette through careful shaping of parapets, roofs, and dormers.

The third stage focused on details that would emphasize salient features of the composition, such as the use of small tile patterns and street numbers and the introduction of lintels or sills. These and many other details all clarify the character and ideas established during the other levels of development.

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