

## PART 2: BEYOND NEW URBANISM

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### HOUSING FABRIC AS URBAN FORM

#### A NEW URBANIST ARGUMENT AGAINST THREE GENERATIONS OF ANTI-URBAN MODERNIST HOUSING

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They do not acknowledge it or even remember it anymore, but the modernist opposition to the New Urbanism practices its own Charter. It is called the Charter of Athens. It was framed during the Fourth Congress of CIAM, “The Functional City,” which took place in Athens, Greece, and also on board the S.S. *Patris*, sailing through the Aegean Sea in 1933. The Charter of Athens was the critical instrument in establishing the ideology and the global urbanist domination of CIAM and the Modern Movement. It was written under the strong influence of Le Corbusier, who had, during the same year, published his radical treatise on modern planning called *The Radiant City (La Ville radiieuse)*. Both through the Charter and in this book, Le Corbusier spelled out in absolute detail the theoretical underpinnings of the ideal city of the twentieth century, its formal principles, and the manner in which, applied through individual projects, it would come to transform the world.

Le Corbusier was a master polemicist and a keen observer of the traditional city. By the early 1930s, he had concluded

that the dimensions of its blocks and the spacing of its intersections could not accommodate the speed of the automobile—in effect that the traditional urban infrastructure of 5,000 years of human development was not fit to become the formal root of the contemporary city. He made this point explicitly with reference to the shortcomings of the Champs Elysees in Paris in his seminal book *The City of Tomorrow (Urbanisme)* of 1925.

The CIAM founders and their followers interpreted the city, per a machine analogy, as operating under a limited number of standard building parts at maximum repetition and efficiency—the diametric opposite of the traditional city. He followed up with individual design projects absent of traditional blocks, streets, and familiar building types. His drastically overscaled urbanism of freeways, repeating, massive housing blocks, and isolated monumental buildings became the lingua franca of internationalist modernism’s proponents.

Their theories knowingly rejected not only the structure of the European medieval city, but also the entire rationalist



**FIG. 1** “Venice is a great inducement for us to continue studying urban organization in a machine age civilization”—Le Corbusier, from *La Ville Radiieuse*.

urban tradition from the Renaissance to the twentieth century. In their place, he proposed a “modern urban form”: disaggregating streets from blocks and buildings, designing them all to the scale and needs of the automobile, and allowing them to each operate for their own benefit, separated from the others.

When analyzing Venice, Italy, in the *The Radiant City* (fig. 1), Le Corbusier observed admiringly that canals and streets were disconnected from each other. He thought this to be a highly desirable pattern because it allowed pedestrians and gondolas to operate each on their own speed and traffic volume terms. He proceeded to argue through his subsequent projects that all streets everywhere should be separated from each other, as should the other two key ingredients of urban form, blocks and buildings—all of

this in the interest of optimizing the individual performance of each.

Buildings would be divorced from their blocks and right-of-ways by being designed at an enormous scale and in a mechanically repeated pattern that rendered them not as interrelated objects but rather as continuous and neutral infrastructure, separated from the ground and relieved of any relationship to other finite building fragments. Dwelling units were also limited in type and range and endlessly repeated in the interest of inexpensive production. Le Corbusier’s project for a Suburb of Rome of 1934 was typical of this emerging formal strategy (fig. 2).

When Le Corbusier began to apply his ideas as large-scale additions to existing cities, as in the case of Antwerp in

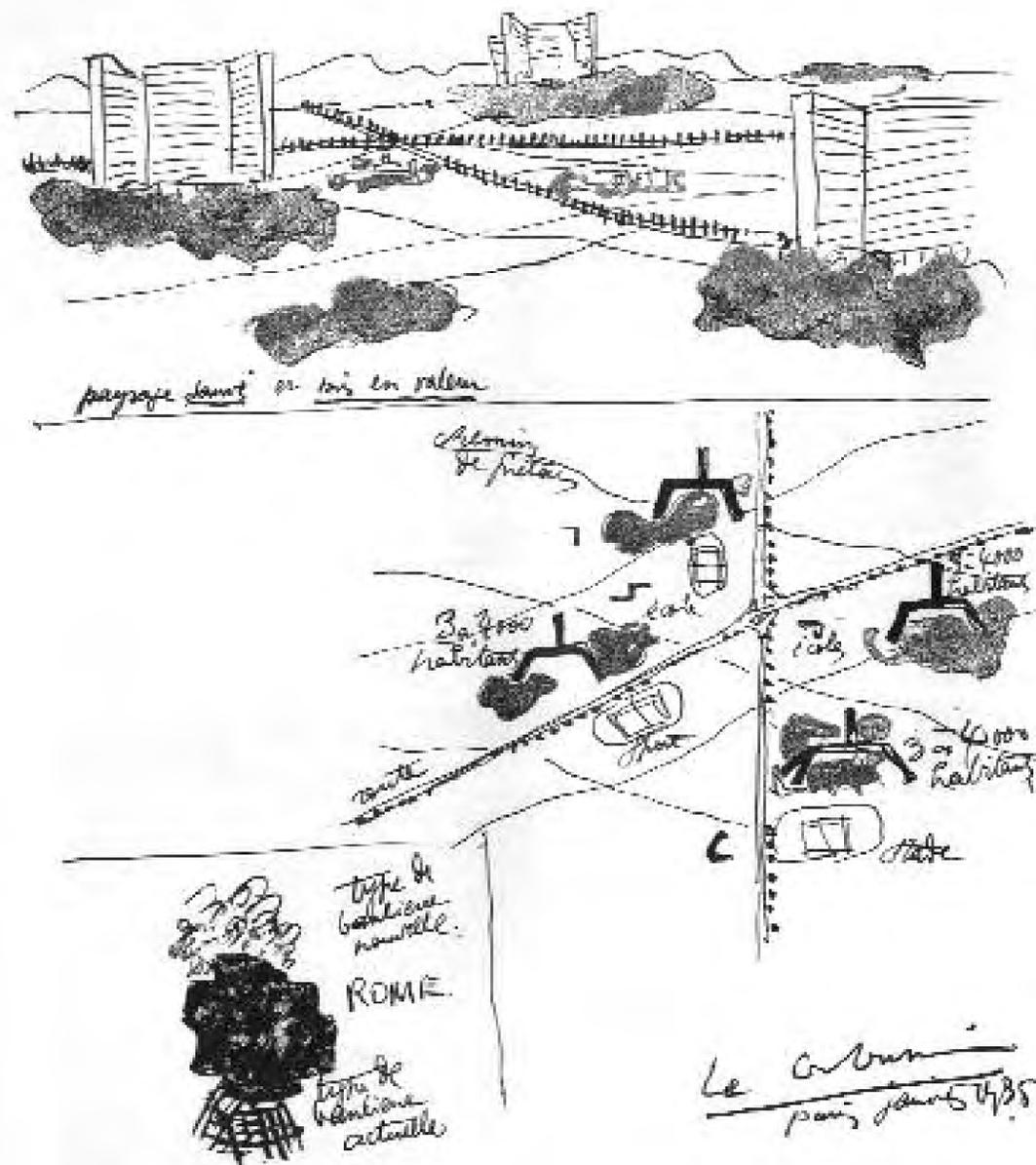


FIG. 2 Le Corbusier, Suburb of Rome, 1934, from *La Ville Radieuse*.

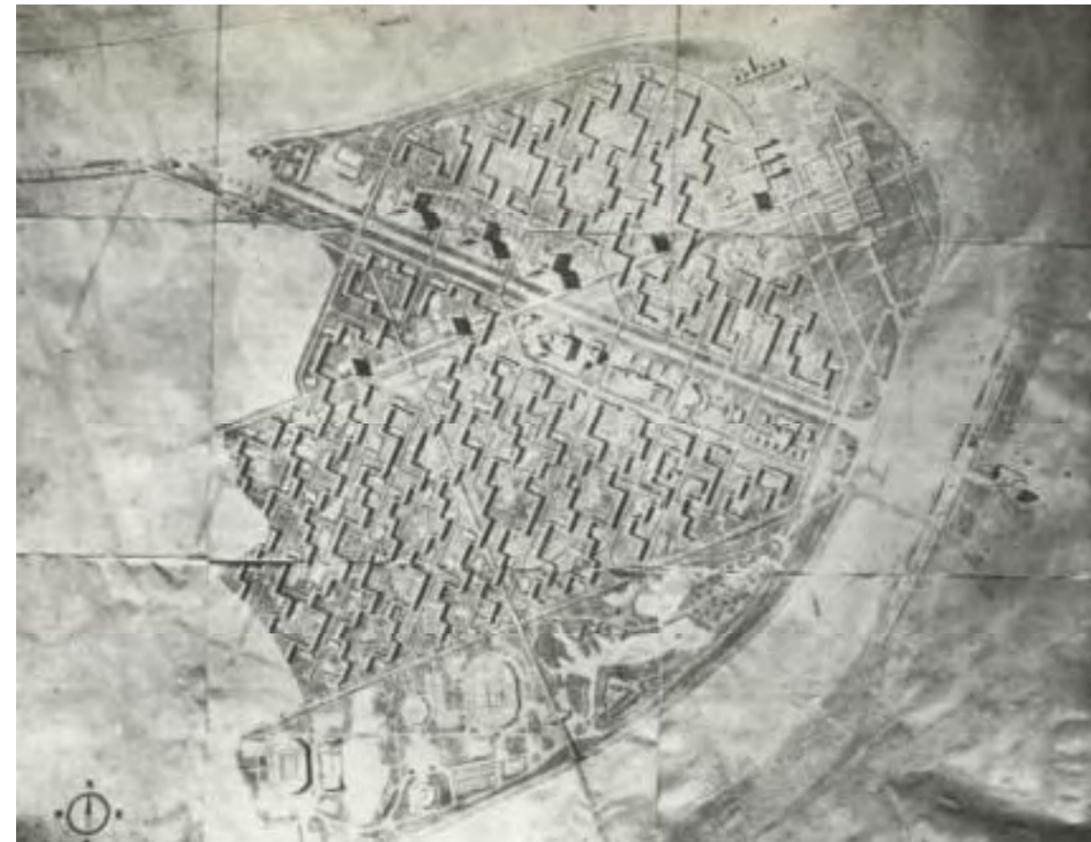


FIG. 3 Le Corbusier, Urbanization of the Left Bank of the Scheldt in Antwerp, 1933, from *La Ville Radieuse*.

1933 (fig. 3), the magnitude of the disparity between the physical scale of the proposed and the existing city fabric was cleverly disguised. The pattern of the new, modern urban growth seemed relatively tame because it was not possible to understand it or to see it in clear juxtaposition to the historic city. The conflict between the two began to emerge more clearly, when figure/field drawings of great European metropolitan centers were drawn side by side with Corbusian “Blocs en Redent” in *The Radiant City*, and in a scale where new and old could be readily compared (fig. 4). Eventually, more and more arrogant assertions of the merits of a housing-block-based, hypermonumental CIAM urbanism began to emerge in written and in architectural form. Le Corbusier had dedicated the Radiant City to “Authority.” Not an odd choice, considering the ascendance of authoritarian, both fascist and communist, regimes at the time.

Before long, modernist architects began to test the ambitions of their potential totalitarian clients by envisioning new, grand, and often brutal urbanist transformations. The project for the renovation and extension of Barcelona in 1932 by GATEPAC, the Catalan branch of CIAM, was such an early project—and an ominous sign of international developments to come. The pattern and size of streets, the size of blocks, the repetition and immense scale of both new buildings and the urban space between them, the intended demolition of the Barrio Gotico, all rendered older, existing urban

neighborhoods, and the human life that they enabled, immediately obsolete (figs. 5, 6). This sense of an a priori dismissal of the existing city as irrelevant has been key to the urban culture of modernism from the beginning. Clearance became the engine of urban renewal in the second half of the twentieth century. Throughout the world, the lucky cities that were spared the fate of aerial bombardment during the Second World War were brutally demolished by the pickaxe of the modernist architect/planner.

After 1945, the urban pattern that was used to replace or to extend traditional cities became massively larger. Streets and blocks were increasingly scaled to the automobile and challenged the very presence of the pedestrian. Buildings emerged as autonomous objects of singular, monumental form, typically as large as the sites given to accommodate them. Housing buildings were conceived as typical blocks, their form reflecting the average density of the entitlement of each site. They were repeated mindlessly, under the pretense that their authors and sponsors were operating in line with the mass production ethic of a machine culture and with the discipline of machine production. This, of course, has never been the case. Dwellings for people to live in were renamed product.

Amazingly, the theory and practice of modernist housing design launched in 1933 have thrived independently of the political regime that sponsored them. Wanton urban destruc-

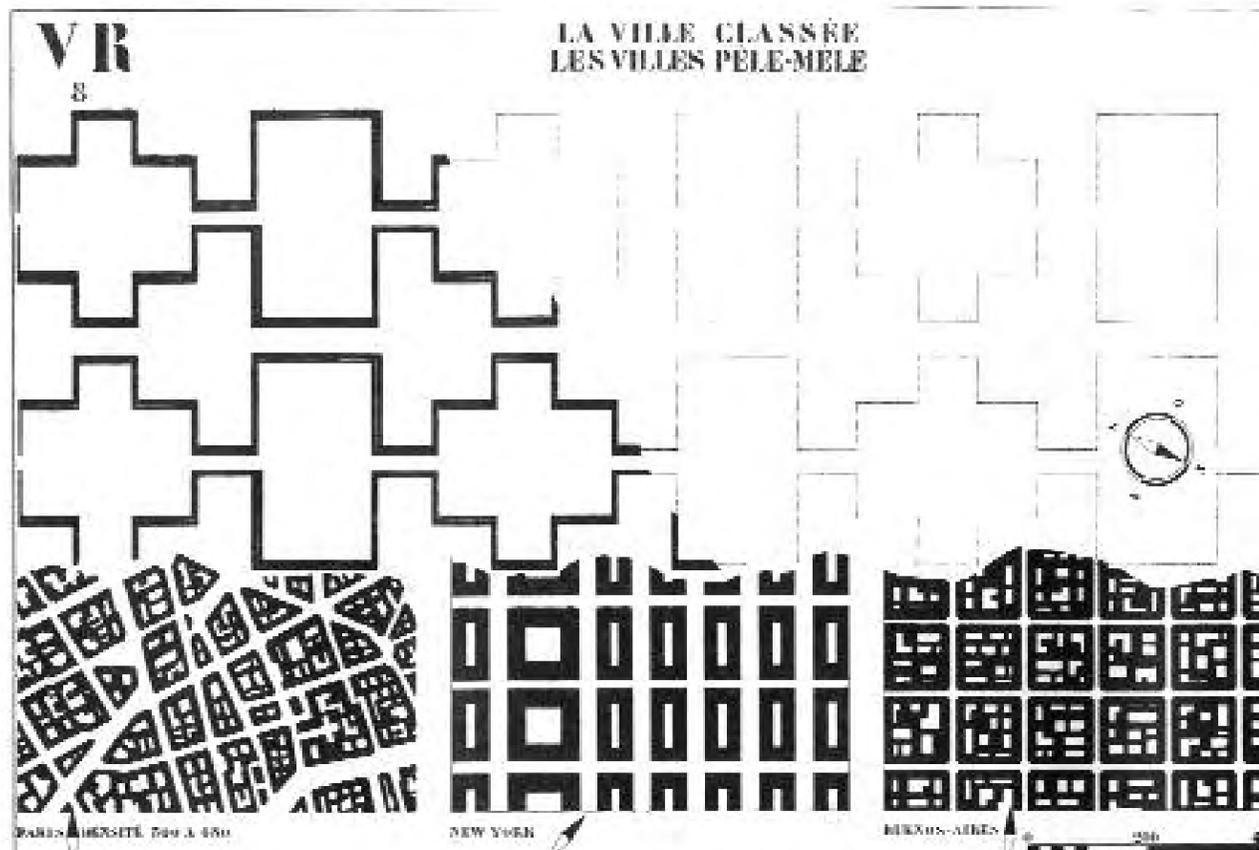


FIG. 4 "The New Scale of Urban Housing Units, Elimination of the Street, Elimination of the Courtyard," from *La Ville Radieuse*.

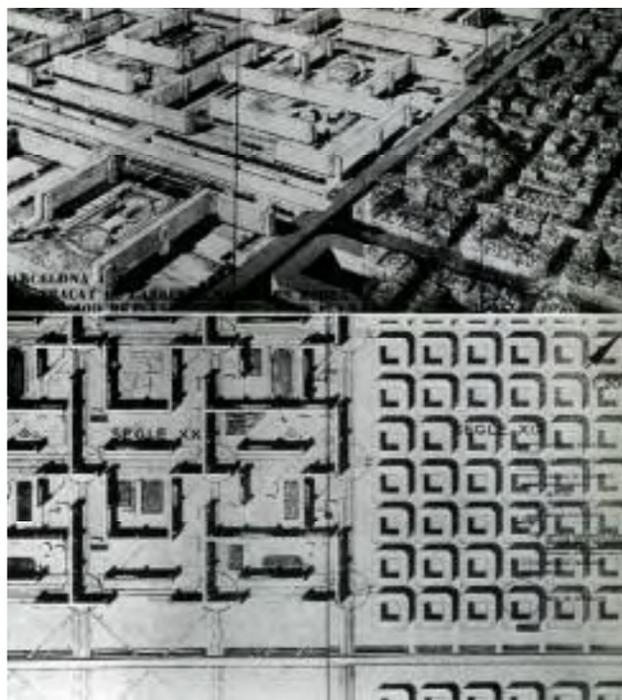


FIG. 5 Josep Lluís Sert, "Old and New Neighborhoods, Barcelona," from *Can our Cities Survive?*

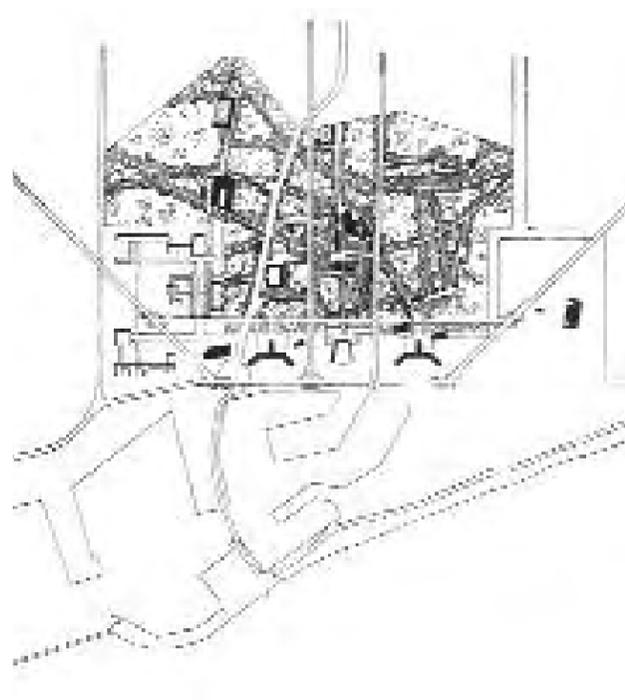


FIG. 6 Le Corbusier, the "Macia" plan for Barcelona, 1932, from *La Ville Radieuse*.

tion and stupefying suburbanization have been promoted by governments across the political spectrum, from capitalism to communism, from the public housing programs of New York and every other American metropolis to the Soviet reconstruction of Leningrad after World War Two. The pattern continues unabated in the breathtakingly rapid urban development of China since 1990.

There were, of course, severe reactions to this process of urban restructuring and "renewal," particularly in the United States. The traditional city proved to be too resilient, too vast a public investment and physical presence, too useful and beloved an object, too well defended by various citizen groups, and ultimately too expensive to change in a wholesale modernist fashion. And the availability of open land on the periphery of the American metropolis fueled a sprawl binge unprecedented in the history of the world that canceled the modernist dream of controlling urban growth by design.

Slowly but steadily, modernist projects in America began to falter in the marketplace. Their one-size-fits-all architecture in program, form, and style proved to be less desirable and less marketable than the traditional buildings these projects displaced. As it became increasingly invasive of neighborhoods, modernist housing began to have a worse effect of blight and disinvestment on its surroundings than the buildings it was ostensibly replacing. By the 1980s it was virtually impossible to build the isolated, dull, and repetitive buildings in the style of the pantheon of modern housing without massive negative popular reaction.

Yet, this kind of housing is still being perpetuated, decades later, by the continuing corrosive influence of zoning codes. Modernist codes in transportation, infrastructure, and planning institutionalized the failed vision of "a new urban order" at the same time as doctrinaire modernist housing projects were beginning to be understood as a hoax. The unmixing of uses, excessive parking standards, elimination of a shared realm of public space, collapse in the diversity of building and dwelling types, and emergence of the megablock and house tracts were all purposefully packaged into codes, often copied from one municipality to another.

The principal ingredients of modern housing forms and their damaging urban consequences were cleverly camouflaged in the body of the seemingly innocuous verbal and numerical recipes of this Euclidean zoning. The drag effect continues unabated to our day: Small-scale modernist housing fragments are allowable by right. They are enabled by Floor Area Ratio (FAR) rules as opposed to traditionally sanctioned housing typologies. Without typological discipline, housing projects are rendered a priori monumental and incompatible with their surroundings. Continuous disorder and chaos-by-design are introduced incrementally, one building project at a time. The American municipal system of governance is converted into an ineffective circus, where much floor time is still taken by the micromanaging of planning and design issues, by people who know little about either subject, to ends that please no one and continuously undermine both the form and the quality of life for everyone in the city.



FIG. 7 Queensbridge Houses, New York City, 1939, from Sert's *Can our Cities Survive?*



FIG. 8 Avtovo Residential Quarter, St. Petersburg, from *Leningrad, Aménagement et Construction, 1945–1957*.

The random, ugly, disconnected, and dense market housing projects recently built in your neighborhood may not look like a heroic fragment of the Ville Radieuse. They were drawn by lesser hands and minds, which were still schooled to believe that they had the talent and the undisputed authority of true masters. Their repetitive, banal housing designs obey the rules of the same theory and intellectual tradition as the heroic, mechanically repetitive designs of CIAM. Worse still, they are imposed by regulation from above, by a cynical and exhausted architectural avant-gardism that keeps on undermining the traditional city, one project at a time. Use-based zoning has now reached the end of its useful life, yet it continues to wreak havoc on the form of the American city.

After decades of negative consequences, we now know yet again that this theory of disaggregated urban design is grossly inadequate and misleading. For best functional and formal performance, cities depend both on the infinite variety, the diversity, and the total integration of their constituent parts. Streets of all types and all infrastructures operate best in interconnected networks. Urban spaces are best formed by the incremental construction of individual buildings that are designed with open-space formation in mind. Monument buildings depend for their visibility on the collective form of adjacent fabric buildings. The best fabric buildings are generated on integrated street networks. The list goes on.

The recent modernist mantra that contemporary cities are out of human control is a self-fulfilling prophecy. For half a century, the measures introduced by most architects to ameliorate perceived urban problems have wreaked a level of chaos-by-design worse than the problems that invited architectural mediation in the first place. The Venice/LeCorbusier virus of separation of buildings from their urban surroundings has been a devastating conceptual gap that has allowed architects in the twentieth century to destroy cities all over the world. In the process, the erosion of their physical character has measurably reduced the livability of urban settings worldwide as well.

It is clear that as a response to three generations of failed housing design, New Urbanist housing projects need to be realized under a theory and through a method that binds their architecture to a new urban and environmental protocol. The theory is based on the charter of the Congress for the New Urbanism and is principally connected to those articles that advocate housing design as an ingredient of neighborhood- and district-making. The method depends on the design of a regulating plan that includes permanently fixed rights-of-way and blocks and a range of development intensities. Blocks are divided into lots. Individual lots are then coded by building placement, building frontage, building height and profile, building use, and parking placement. Each lot is entitled with a range of building types. Diversity is guaranteed by architecture designed by various hands, while the underlying layers of urban structure and typological discipline produce a harmonious city unified in form to the degree desired by its sponsors, its designers, and its users.



**FIG. 9** “A spaceship landed in my garden.” Pasadena, California, ca. 1960.

What is clearly not spelled out by the theoretical toolbox of the New Urbanism is a specific set of issues that may assist in the design of particular housing projects—neighborhood and district fragments, conceived as a fabric of buildings and open space, and a pattern of landscape and infrastructure.

In our recent housing work, we have begun to practice on a set of New Urbanist housing principles and a checklist of accompanying questions. We have found these useful in framing the general content of our housing and urbanist projects, and in probing the particular architectural design of individual sites.

**1. An individual project must be designed to an urban form that is larger than its specific site.**

- Is the project site part of a neighborhood or district-wide regulating plan that distributes building intensity across multiple sites?
- Is the project designed to various specific densities as opposed to one average one?
- Does it contribute to the formation of a building fabric, an open space figure, a streetscape, and infrastructure pattern that are larger in size and scale than its site?
- Does it support a block structure, including building frontages and profiles that can generate a coherent public realm?

**2. An individual project must engage and respond to the various forms of regional infrastructure that border or intersect its site.**

Is the project connected to and scaled properly to large scale, including:

- natural elements, such as rivers, lakefronts, agricultural fields, major views, etc.?
- transportation elements, such as rail and transit lines, thoroughfares, freeways, canals, etc.?
- recreational elements such as parks, greenways, playing fields, etc.?
- sustainable water management systems and utility networks?

**3. An individual project must offer a traffic/parking solution that serves both it and the neighborhood/district it is a part**

**of; the denser and more mixed the setting, the greater the need to provide a parking framework that transcends the needs of each project.**

- Does the project direct the points of car access into its site in a manner that supports the pedestrian qualities of surrounding thoroughfares?
- Do building(s) obscure or entirely suppress the visual presence of cars?
- Is parking provided conveniently to all the uses that it serves?
- Are project parking solutions of a pattern that is repeated by neighboring projects?
- Is the parking load of an individual project reduced by a neighborhood- or district-wide shared parking policy?

**4. Buildings must be located and massed in a manner that promotes the incremental completion of a figure of shared public space.**

- Are buildings designed into ensembles by pairing their front, side, and back facades?
- Are buildings serviced and parked in a manner that maintains their public facades car-free?
- Do blocks and buildings define a network of space types by reference to a spectrum of uses from public to private?
- Do buildings define a continuously accessible and pedestrian-scaled ground floor?

**5. Buildings must be conceived in form proper, rather than in mechanical repetition.**

- Does the project need to be composed of various building types?
- Do individual buildings contain a variety of dwelling types appropriately mixed?
- Is the project composed to express a scale other than that of repeating units?
- Is the project compatible with the form and details of adjacent buildings?
- Are buildings expressed in a variety of styles and related to the style interval of the urban setting they are inserted into?
- Are the color, texture, and materials of the project designed in response to its setting?

**6. Buildings must respond to the natural conditions of their site and become part of a more general landscape and streetscape pattern beyond its boundaries.**

- Are buildings properly configured for solar orientation, natural daylighting, and natural ventilation, depending on their location within a site plan?
- Are buildings climate-specific in terms of their thermal mass, apertures, and materials?
- Are buildings and gardens efficient in terms of water and energy consumption?
- Are buildings designed for permanence?
- Do buildings form climate-specific garden extensions to interior rooms?
- Does the project form gardens at various scales, e.g., patios, courtyards, quads, greens?
- Does the project complete the patterns of adjacent public landscape and streetscape larger than itself?

**7. Buildings must be composed to respond to their particular setting.**

- Is the project designed to stand out or fit in?
- Are buildings designed by reference to their city block location, e.g., corner vs. mid-block, A Street vs. B street vs. Alley?
- Are buildings designed to define routine or unique public space, to focus on axial views, and to promote the collective architectural fabric of the city?
- Is building detail and ornament visible to the pedestrian-proximate portions of the building?

This simple and evolving set of issues, and the questions that they generate, can become the inspiration for the design of an engaging New Urbanist housing fabric that is at the same time the foundation of traditional town form.

The secret to this New Urbanist housing design is abandoning the machine analogy—designing without reference to floor area ratios (FAR), average densities, deadening repetition, and one-size-fits-all recipes; recognizing that buildings leverage all other aspects of urban structure, open space, landscape, transportation, and utility infrastructure; and promoting the idea that through the variety, diversity and character inherent in time-honored building typologies—so that every single design can become a significant link in constructing towns and cities of harmonious overall form.