Urban Design and Visual Resources

Chapter 10

In an urban design assessment under CEQR, one considers whether and how a project may change the experience of a pedestrian in the project area. The assessment focuses on the components of a proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built and natural environment in the context of the project. The analysis of urban design relies on observations, drawings, maps, renderings, and most importantly, photographs and photographic montages taken from a pedestrian’s eye level. These representations allow the public to see what a project would look like in the future.

As indicated throughout the Manual, it is important for an applicant to work closely with the lead agency during the entire environmental review process. In addition, the New York City Department of City Planning (DCP) often works with the lead agency during the CEQR process to provide technical review, assistance, and recommendations relating to urban design. Ideally, DCP should be consulted early on in the review process, the lead planners and designers may be brought on for consultation during this time.

100. Definitions

Urban design is the totality of elements that shape and affect a pedestrian’s experience of public space. The practice of urban design focuses on people and their relationship to the buildings and the parks, the streets and the waterfronts, the plazas and the natural areas around them. These features can be further described as characteristics of the public realm which shape and influence how we live, learn, work, exercise, play, socialize, walk, get around or simply rest. The following elements play an important role in that experience.

**Streets.** For many neighborhoods, streets or rights of way are the primary component of public space. The dimensions, arrangement, and orientation of streets create the blocks on which buildings and open spaces are organized, set street views, and define the experience and flow of activity in an area. The apportionment of street space between cars, bicycles, transit, and sidewalks and the careful design of street furniture, grade, materials used, and permanent fixtures, including plantings, streetlights, fire hydrants, curb cuts, or any other furniture are critical in creating a successful streetscape. To further understand how streets shape the pedestrian experience, refer to ‘Active Design - Shaping the Sidewalk Experience’ available on DCP’s website.

**Buildings.** Buildings and streets together, form the backdrop for public space and activity. A building’s street wall forms the most common backdrop in the city for public space. A building’s size, shape, orientation, height, setbacks, lot coverage, density, placement and use on the zoning lot and block; the orientation of active uses; and pedestrian and vehicular entrances all play major roles in the vitality of the streetscape. Furthermore, building facades, accessible spaces or rooftops also make up the public realms that enrich the visual and experiential character of an area.

**Visual Resources.** A visual resource is the connection from the public realm to significant natural or built features, including, but not limited to, views of the waterfront, public parks, public art, statues or sculptures, landmark structures or districts, otherwise distinct buildings or groups of buildings that may be iconic or historic, and natural resources.

**Open Space.** For the purpose of urban design, open space includes public and private areas such as parks, yards, cemeteries, parking lots, playgrounds, community gardens, plazas, and privately-owned public spaces.
**NATURAL FEATURES.** Natural features include vegetation (i.e., trees, shrubs, grasses, etc.), geologic, topographic, and aquatic features. Rock outcroppings, steep slopes or varied ground elevation, beaches, or wetlands may help define the overall character of an area.

**WIND.** Channelized wind pressure from between tall buildings and “down-washed” wind pressure from parallel tall buildings may cause winds that affect pedestrian comfort and safety. “Down-washed” wind is wind that is propelled downward by an intervening structure, such as a high-rise building, that causes high wind speeds at the street level.

### 200. Determining Whether an Urban Design and Visual Resources Assessment is Appropriate

In general, an assessment of urban design may be warranted when the project may have effects on one or more of the elements that contribute to the pedestrian experience described above. There is generally no need to conduct an urban design analysis if a proposed project would be constructed within existing zoning envelopes and would not result in physical changes beyond the bulk and form permitted “as-of-right.”

### 210. Preliminary Analysis Thresholds

A preliminary assessment is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including the following:

1. Projects that permit the modification of yard, height, and setback requirements.
2. Projects that result in an increase in built floor area beyond what would be allowed “as-of-right” or in the future without the proposed project.

However, certain projects that may affect buildings, such as a variance of a rear yard requirement, do not warrant an assessment of urban design because the projects do not result in a change to the experience of a pedestrian on the sidewalk or at the street level. Another example would be a change in use that does not change the bulk controls of a block or meet the conditions listed above. A special permit to allow an accessory parking garage to operate as a public parking garage, for example, would meet this condition.

To complete a preliminary assessment, the analyst should use the checklist below in Section 320. The checklist forms a “snapshot” of the project and provides the appropriate information to help determine whether a potential for significant adverse impacts exists and, consequently, whether further analysis is warranted. If a preliminary assessment determines that a change to the pedestrian experience is minimal and unlikely to disturb the vitality, the walkability, or the visual character of the area, then no further assessment is warranted.

### 220. Detailed Analysis Thresholds

The lead agency must use its discretion to determine if a more detailed analysis is needed. Detailed analyses are generally appropriate for all area-wide rezonings that include an increase in permitted floor area or changes in height and setback requirements, general large-scale developments, or projects that would result in substantial changes to a historic district or building. Examples may include projects that have the potential to obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings.

### 230. Pedestrian Wind Conditions

The construction of projects involving multiple, tall buildings at or in close proximity to waterfront sites may result in an exacerbation of wind conditions due to ‘channelization’ or ‘downwash’ effects that may affect pedestrian comfort and safety. If appropriate, the lead agency should consult with DCP or the Mayor’s Office of Environmental Coordination (MOEC) to determine whether a pedestrian wind condition analysis is warranted for a proposed project. Factors that may be considered in making this determination include, but are not necessarily limited to:
Whether the location is exposed to high wind conditions, such as along west and northwest-facing waterfronts, or other locations at or in close proximity to waterfront sites where prevailing winds from the waterfront are not attenuated by buildings or natural features;

- The size of the project (generally only projects of a substantial size have the potential to alter wind conditions);
- The number of proposed buildings to be constructed;
- The size and orientation of the buildings that are proposed to be constructed; and
- The site plan and surrounding pedestrian context of the project.

If an analysis is determined to be warranted, it should focus on the extent to which the massing and orientation of buildings and other features of the proposed development contribute to an exacerbation of pedestrian wind conditions. In the event that studies indicate the potential for exacerbation of pedestrian wind conditions that could affect pedestrian safety, modifications to the urban design features of the project, including changes to building massing, landscaping and other measures, that are consistent with the overall urban design objectives of the project, should be considered.

### 300. ASSESSMENT

#### 310. STUDY AREAS

The study area for urban design is the area where the project may influence land use patterns, the built environment and pedestrian’s experiences in the public realm surrounding the project area. It is generally consistent with the use for the land use analysis. For visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified. The land use study area may serve as the initial basis for analysis; however, in many cases where significant visual resources exist, it may be appropriate to look beyond the land use study area to encompass views outside of this area, as is often the case with waterfront sites or sites within or near historic districts.

#### 311. Describing the Existing Area

Both graphics and text may be used to describe the area affected by a project. This assessment should be organized to identify the elements of urban design in the area.

The information in both the preliminary assessment and detailed analysis helps to describe the existing urban design of the area. For example, the affected areas may be described by the regularity of street grid, building form, site planning and configuration, parking, streetscape, pedestrian experience(s) and accessibility, as well as by predominant land use(s): low-rise, residential, medium-density residential, commercial, industrial, or undeveloped.

#### 320. PRELIMINARY ASSESSMENT

The purpose of the preliminary assessment is to determine whether any physical changes proposed by the project may have the potential to significantly and adversely affect elements of urban design.

The preliminary assessment, therefore, should provide the following information:

a) A concise narrative of the existing project area, the future No-Action condition, and the future With-Action condition. The narrative should address any changes in the visual experience of the pedestrian and include information related to changes in proposed floor area, lot coverage, building height(s), setbacks, changes in land use(s) and any other urban design aspect that may affect the surrounding built environment and natural environment;
b) If view corridors exist within the study area, a concise narrative describing the proposed project as it relates to visual resources should be provided. The narrative should include, as appropriate, information regarding the project’s proximity to the visual resource(s), orientation, height, bulk, etc.

c) An area map showing the context of the study area as described in Section 311, including major uses and view corridors, vehicular and pedestrian access, open spaces, community facilities, public transit corridors, bike paths and any other elements of urban design that affect the pedestrian experience of the project study area, as applicable. Urban design elements as described in Section 100 of this chapter as well as documentation gathered during field surveys conducted as part of other chapters (Land Use, Zoning and Public Policy, Open Space, etc.) may be used for this purpose. Aerial imagery and land use maps available through the DCP website or other resources may be used for this purpose.

d) Ground-level photographs of the site area with the immediate context. Photos must be taken from the pedestrian point of view (sidewalks, parks or other visual resources, where pedestrians can safely experience the development). The photographs should be taken recently (within the last six months). Should the context of the study area change prior to the completion of the environmental review, the Lead Agency may require the assessment be updated with new photographs. Additionally, street imagery obtained from the web is not acceptable for this purpose.

e) Index map of existing conditions photos that show where photos are taken. This could be combined with (b) if an area map is being used to show the context.

f) Imposition of no action and with action scenario on aerial imagery/three-dimensional model to understand the larger context of development. A three-dimensional model of New York City is available at on the DCP website.

g) A three-dimensional representation of no-action and with-action scenario using the photographs as mentioned in part (d) above. This representation should include the following within the same graphic:
   i. Red dashed outline of the allowable envelope on both no-action and with action. Such detail may not be warranted for a project with multiple development sites or at the discretion of the lead agency;
   ii. Number of floors in the building massing, street wall heights, building heights and setback dimensions;
   iii. Markings of iconic buildings, landmarks and other visual resources for reference;
   iv. Extent of study area, if applicable, and;

h) Known developments that are underway or approved as part of some other land use action.

If the preliminary assessment shows that changes to the pedestrian environment could be significant and adverse, the lead agency may determine if a detailed analysis is required. As described in section 220, such conditions may also include, but are not limited to:

- When the project partially or totally blocks a view corridor or a natural or built visual resource as listed in section 100, and that resource is rare in the area or considered a defining feature of the neighborhood; or
- When the project changes urban design elements so that the context of a natural or built visual resource is altered (for example, if the project alters the street grid so that the approach to the resource changes; if the project changes the scale of surrounding buildings so that the context changes; if the project removes lawns or other open areas that serve as a setting for the resource).
330. DETAILED ANALYSIS

To complete a detailed analysis, use the checklist below, in addition to the checklist provided in the preliminary assessment above. This checklist requests drawings and other information that provide an objective and clear representation of the likely effect of the proposed project on the pedestrian's experience of the public realm by analyzing urban design elements, such as street orientation, flow of activity, access points, active uses on ground floor and visual resources. If feasible, the analyst should compile these items for the existing condition, the future No-Action condition, and the future With-Action condition, and annotate these as appropriate to identify potential positive and significant adverse impacts of design.

- Site plans – 1: 100 (multiple as appropriate). For those instances when a proposed project does not include a specific development site but applies to a large area (such as an area-wide rezoning), include a series of potential site plans covering a range of possibilities.
- Sketches or renderings of the future With-Action condition for each existing view. Architectural and landscape detail is typically not warranted, unless the details are to be approved as part of the project (required components of a site plan, architectural designs that are mandated through the approval process, etc.). Any details that are shown on sketches and renderings that would not be required as part of the project should be noted as illustrative on the figures and should be understood to be placeholders.
- Completed chart of building massing, including floor area calculations, lot and tower coverage, average floor plate sizes, and open area.
- Proposed program and use distribution.
- Elevations along all street fronts showing street wall heights, setbacks, recesses and transparencies. All should be clearly labeled.
- Detailed landscape plans of the future With-Action condition public areas showing paving, lighting, planting, seating, and other elements.
- Sections through street and other pedestrian areas showing sidewalk widths, plantings, furnishings, and other elements of pedestrian streetscape for the future With-Action condition. Sections should extend to surrounding buildings on both sides.
- Wind assessment study, if warranted

NOTE: For all drawings, all significant dimensions should be labeled clearly. Dimensions should be given in feet and inches. Drawings, if printed, should be on 8.5” x 11” paper or be able to be folded easily to that size. All drawing should be clearly labeled with titles from the checklist. All annotations should be legible. All drawings and renderings should be readable in a black and white printed format.

340. FUTURE NO-ACTION CONDITION

Using the information gathered above, assess whether and how the existing urban design conditions of the neighborhood are expected to change in the future No-Action condition. The assessment should reference the figures provided and explain the specific changed conditions that the figures illustrate.

350. FUTURE WITH-ACTION CONDITION

To determine how the proposed project may affect urban design relative to the No-Action conditions, the assessment describes the proposed project in terms of how it would affect the area’s defining elements of urban design in the With-Action condition compared to the future No-Action condition. The assessment should reference the figures provided and explain the specific changed conditions that the figures illustrate.

Generic actions can be assessed in much the same way, with somewhat less detail than site-specific actions' assessments. In some cases, when less detail about the project is available, the assessment considers the circumstances or issues that may affect the urban design in the study area.
400. Determining Impact Significance

Determining the significance of an urban design impact requires consideration of the degree to which a project would result in a change to the built environment’s arrangement, appearance, or functionality and whether the change would negatively affect a pedestrian’s experience of the area. One important consideration is a project’s context -- for example, the scale and use of surrounding buildings. However, matching context is not necessarily the sole benchmark for measuring urban design impacts.

All changes should be clearly denoted on the comparative drawings of the no-action and with action condition, in which they are shown to determine the impact, and whether that impact is significant.

Key considerations in the assessment of the significance of a visual resource impact may include whether the project obstructs important visual resources and whether such obstruction would be permanent, seasonal, or temporary; how many viewers would be affected; whether the view is unique or do similar views exist; or whether the visual resource can be seen from many other locations.

500. Developing Mitigation

Because significant adverse impacts on urban design relate to projects that physically change a site (or provide an opportunity for physical change, such as through a rezoning) in terms of the project’s appearance, location, placement on the block, effect on the street grid, or alteration of topography, etc., mitigation of these impacts may involve changes to these features that would better complement the area. If a significant adverse impact is identified, project changes necessary to avoid the impact may be examined as described in Section 600, below.

600. Developing Alternatives

Alternatives that reduce or eliminate significant adverse impacts on urban design may be classified into two major types: (i) those that involve substantial design changes to the proposed project and (ii) those involving alternative sites. Project alternatives usually include a different physical design that would not result in the same impacts as the project as proposed. These physical changes may include a reduction in size, major alterations to the site plan, changes in the orientation of buildings, or alterations to proposed street mappings or demappings.

Alternative site analyses may involve the examination of a different site for the proposed project, which would result in a project that is more consistent with the streetscape of the alternative site’s surrounding area, or one that would not block important view corridors, eliminate important natural areas, etc.

700. Regulations and Coordination

710. Regulations and Standards

There are no specific city, state, or federal statutes, regulations, or standards governing the analysis of visual character.

720. Applicable Coordination

As noted in Chapter 3, the Department of City Planning is the City’s expert agency for urban design analyses. Lead agencies and applicants are encouraged to consult with the lead planner assigned to their project to connect and coordinate with the Department’s Urban Design division, as needed.

If a project may affect public waterfront views, consultation with the Waterfront and Open Space Division of DCP is recommended. Similarly, if a project may cause obstruction of a view of a landmark (see Chapter 9, “Historic Resources”), consultation with the Landmarks Preservation Commission (LPC) is recommended.
730. LOCATION OF INFORMATION

- For Urban Design resources, go to https://nyc.gov/urbandesign
- For online Zoning Resolution, go to https://zr.planning.nyc.gov/
- For land use map information and aerial imagery, go to https://zola.planning.nyc.gov
- NYC 3D model by Community District: nyc.gov/3Dmodel
- Information on Active Design is available at https://www1.nyc.gov/site/planning/plans/active-design-guidelines/active-design-guidelines.page
- Tax maps are available at the Department of Finance: DOF Digital Tax Maps
- City maps are available for viewing in the Borough President’s office in each borough and at DCP.