ON-LINE ZONING ORDINANCE DISCLAIMER

The Web version of the City of Cambridge, Massachusetts Zoning Ordinance is provided for reference and the convenience of having the Ordinance in a computer-readable format. The print version of the Zoning Ordinance, together with any amendments adopted by the City Council subsequent to the most recent update to the print version, remains the official version of the Ordinance. If any discrepancies exist between the print and web versions of the Zoning Ordinance, the print version, together with any City Council amendments, shall be considered correct. Recent amendments to the Zoning Ordinance may appear on the Web prior to being incorporated into the print version of the Ordinance.
ARTICLE 19.000 PROJECT REVIEW

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19.10 Intent and Purpose of Article 19.000

The intent of this Article 19.000 is to establish traffic and urban design standards for development projects likely to have significant impact on abutting properties and the surrounding urban environment.

To realize this intent, Article 19.000 (1) codifies the city's urban design objectives and establishes detailed building and site development standards to regulate new building construction in the city's commercial and high density residential areas, (2) establishes standards by which significant adverse traffic impacts can be measured, and (3) establishes procedures by which individual proposals can be reviewed by the Planning Board, city staff and the general public before a building permit is issued.

The Building and Site Plan Requirements describe the minimally acceptable arrangement of buildings on a lot and as they face the public environment. The Urban Design Objectives establish more general guidelines which, along with the Traffic Impact Indicators, can assist property owners as they consider alternate uses for their property. Where a special permit is required from the Planning Board, the Urban Design Objectives and Traffic Impact Indicators serve as considerations through which the merits of a proposal are judged.

To apply the Building Requirements and Objectives effectively, procedures are established by which public review of new construction can be undertaken. The procedures provide an opportunity for the general public to review and comment on significant new development projects and, where appropriate, they allow the Planning Board, through a special permit process, to establish conditions by which new development can be shaped to serve city urban design objectives more effectively. It is the intent of these procedures to provide a method by which new development proposals can be assessed at an early stage. Such assessment offers the opportunity to explore potential modifications and refinements that would better serve the interests of both the city and the project proponent. Similarly, potential negative impacts can be identified and modifications explored that would reduce or eliminate them.

It is understood that nonprofit educational and religious uses and activities have special use, building and site development requirements and characteristics. Therefore the procedures and standards established in this Article 19.000 are designed to reflect those special circumstances. In reviewing any development proposal of a nonprofit educational or religious organization, the reviewing body shall apply the standards herein contained in
a reasonable manner in light of the special circumstances applicable to nonprofit religious and educational activities.

This Article 19.000 shall apply to any new construction of a building or structure, addition to a building or structure, or a change of use in an existing building undertaken on or after September 15, 2000.

19.20 PROJECT REVIEW SPECIAL PERMIT

19.21 Purpose. It is the intent of this Section 19.20 to ensure that new construction or changes of use in existing buildings (1) are consistent with the urban design objectives of the City and (2) do not impose substantial adverse impacts on city traffic. A special permit process is established by which the Planning Board may make such findings.

19.21.1 Purpose of Traffic Impact Review. The Planning Board shall assess the impact of the vehicular service and passenger car traffic and pedestrian and bicycle circulation and expected to be generated by a proposed development project. The procedures and requirements of this Section 19.20 are intended to encourage applicants to adopt a development program that reduces the number of single occupancy vehicles coming to the site. Such a program would encourage pedestrian and bicycle access to the site and throughout the neighboring district and reduce potential negative impacts on abutting properties of the vehicles coming to the site. While the review will focus especially on the impacts affecting abutting properties and the immediate environment, the impacts on streets and locations more distant from the site and on transit and bus facilities serving the site will also be assessed.

19.21.21 Purpose of Urban Design Review. The Board shall review the specific design details of buildings and their site layout to ensure that the design of the building and its location on the lot minimize any potential negative impact on abutting properties and on the environment along public streets and sidewalks. Particular attention will be paid to the design of the ground floor; the layout of service facilities including driveways, and parking and loading facilities; the location and screening of mechanical service equipment and waste disposal facilities; landscape amenities; and similar building and site layout details.

19.22 Applicable Zoning Districts. The Project Review Special Permit shall apply to construction and changes of use located in the following zoning districts.

(1) All Office, Business, and Industrial Districts, any PUD district, and NP districts, and any Special District for which an office, business or industrial district serves as the underlying base regulation (SD-1, SD-3, SD-5, SD-7, SD-8 and SD-11), but excluding the MXD district.

(2) Residence C-1A, C-2, C-2A, C-2B, C-3, C-3A, and C-3B districts, and any Special District for which any one of these residence districts serves as the underlying base regulation (SD-2, SD-6, SD-12 and SD-13) and SD-14. A Project Review Special Permit in these districts shall be required only where the construction or portion of the construction is located within one hundred (100) feet of a public way unless the uses proposed in the building are subject to the thresholds established in Table 1.
19.23 Special District Threshold. A Project Review Special Permit shall be required for new building construction of fifty thousand (50,000) gross square feet or more, in all applicable zoning districts [except that in a Business A, Business A-1, and Business A-2 districts a Project Review Special Permit shall be required for new building construction of twenty thousand (20,000) gross square feet or more], or for building construction of less than fifty thousand square feet [or twenty thousand square feet in the BA, BA-1, and BA-2 Districts] where a Table I threshold has been met, on a lot or combination of contiguous lots held in common ownership at any time after September 15, 2000. Where a mix of uses is proposed the threshold shall be determined by the application of the Mixed Use Formula set forth in Table 1.

Notwithstanding the provisions of this Section 19.23 set forth above, the Project Review Special Permit requirement shall not apply to existing gross floor area on a lot built and occupied prior to the effective date of this Article 19 that is demolished and subsequently rebuilt as part of a building project, provided (1) there is no change of use, (2) the reconstruction commences within two years of the start of demolition of the building, and (3) the standards of Section 19.50 are met.

Where reference is made in this Section 19.23 to Gross Floor Area thresholds as set forth in Table 1, the term shall also encompass any other measure of quantity enumerated in the Table (e.g. dwelling units, beds, acres, parking spaces).

**Table 1**

**Thresholds for Required Traffic Study by Land Use Type**

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Threshold: All Land Uses Set forth in Tables 4.30 and 4.56 except as enumerated below.</td>
<td>50,000 sf**</td>
</tr>
<tr>
<td>Transportation Communication &amp; Utility Uses: Section 4.32</td>
<td></td>
</tr>
<tr>
<td>a. Bus or railroad passenger station</td>
<td>Required</td>
</tr>
<tr>
<td>b. Automobile parking lot or parking garage for private passenger cars</td>
<td>150 parking spaces</td>
</tr>
<tr>
<td>c. Railroad freight terminal, railroad yards and shops</td>
<td>50 acres</td>
</tr>
<tr>
<td>d. Truck or bus terminal, yard or building for storage or servicing of trucks, trailers, or buses; parking lot for trucks</td>
<td>Required</td>
</tr>
</tbody>
</table>

Institutional Uses: Section 4.56 (See also Section 4.33)
a. Religious purposes

4. Social or recreation center 40,000 sf
5. Other use with religious purpose 40,000 sf

c. Educational purposes

1. Preschool, day care center, kindergarten 25,000 sf
2. Primary school 40,000 sf
3. Secondary school 40,000 sf
4. College or university athletic facility, auditorium, theatre, library, museum or similar facility, any of which is customarily accessible to the general public on a paid admission fee or other basis
5. College or university laboratory or research facility customarily involving radioactive materials and other controlled substances, high intensity electromagnetic radiation or chemical or biological processes which could entail a high level of danger to the public health
6. Other college or university facility

Dining halls, canteens and similar eating areas

Administrative faculty and staff offices, teaching facilities, service facilities, and facilities not specified above

1. The addition to or relocation of parking spaces in the inventory of institutional parking in existence as of September 15, 2000 (see Section 6.32.2) in association with the construction of a new building.

2. Relocation shall mean the construction of parking spaces at a new location, where the distance between that entrance at the new location most proximate to the closest entrance at the old location is 1,000 feet or more.

7. Vocational or other schools 40,000 sf
e. Health Care Facilities

1. Hospital 35,000 sf
2. Infirmary 25,000 sf
3. Nursing home, convalescent home 250 beds
4. Clinic not affiliated with any other institution 25,000 sf
5. Clinic affiliated with a hospital or accredited university medical school 25,000 sf
6. Clinic connected to a community center 25,000 sf
7. Other health care facilities 25,000 sf

f. Social Service Facilities
1. Social service center 40,000 sf
2. Community Center 40,000 sf

g. Local Government

Fire or police station Not Required
Public parks, playgrounds or public recreation buildings 400 acres

i. Other Institutional Uses
3. Cemetery 100 acres
4. Other institutional use 40,000 sf

Office and Laboratory Uses: Section 4.34

a. Office of a physician, dentist or other medical practitioner not located in a clinic listed under Subsection 4.33(d) 25,000 sf
e. Bank, trust company or similar financial institution 25,000 sf

Retail Business and Consumer Service Establishments: Section 4.35 25,000 sf

Open Air or Drive in Retail and Service: Section 4.36

a. Sales place for flowers, garden supplies, agricultural produce conducted partly or wholly outdoors, commercial greenhouse or garden 25,000 sf
b. Automobile oriented fast order food service establishments Required
c. Drive in bank and other retail or consumer service establishment where motorist does not have to leave his car Required
d. Outdoor amusement park, outdoors sports facility conducted for profit 300 seats
e. Open air or drive in theatre or other open air place of entertainment 300 seats
f. Sale of new or used cars conducted partly or wholly on open lots, or rental agency for automobile, trailers, motorcycles, conducted partly or wholly outdoors. 25,000 sf
g. Automobile service station where no major repairs are made 5 fueling positions
h. Car washing establishment using mechanical equipment for the purpose of Required
cleaning automobiles and other vehicles

Light Industry, Wholesale Business and Storage: Section 4.37

g. Auto body or paint shop 25,000 sf

h. Automotive repair garage not including g above 25,000 sf

** Gross Floor Area exclusive of GFA in parking facilities, except as noted.

**Mixed Use Formula**

Where it is proposed to include a mix of uses in a new development, or substitute a mix of
uses for an existing use in an existing building, a special permit shall not be required
under the provisions of Section 19.20 if:

\[
\frac{GFA}{\text{Threshold}_a} + \frac{GFA}{\text{Threshold}_b} + \frac{GFA}{\text{Threshold}_c} \leq 1
\]

Where “GFA” is the proposed Gross Floor Area (or other indicated quantity measure) for
a use denoted by a subscript and where “Threshold” is the Threshold for that use in Table
1.

19.23.1 Change of Use in an Existing Building Threshold

19.23.11 In an existing building, the Project Review Special Permit shall be required where
the total Gross Floor Area of a new use or uses on a lot exceeds the Gross Floor Area
threshold limits set forth in Table 1 for that new use. Where the change is to a mix of
uses the threshold shall be determined by the application of the Mixed Use Formula set
forth in Table 1.

19.23.2 Incremental Changes on a Lot. Any amount of Gross Floor Area on a lot, subject to this
Article 19.000, that is less than those threshold amounts set forth in Table 1 shall be
subject to this Section 19.20 only when the sum of the following equals or exceeds the
Gross Floor Area thresholds set forth in Sections 19.23 and 19.23.1 above:

\( (1) \) The current proposal for new Gross Floor Area on the lot, plus

\( (2) \) The Gross Floor Area on the lot developed or changed in use within the
preceding five years so as to be subject to this Section 19.20 but for which a
Special Permit under this Section 19.20 was not required, plus

\( (3) \) Any Gross Floor Area on the lot for which a building permit has been issued
but which has yet to be built and occupied and for which a Special Permit
authorized by this Section 19.20 has not been issued within the preceding five
years.

After the granting of the first special permit under this Section 19.20, a subsequent
special permit shall only be required when the total of additional Gross Floor Area or new
uses exceeds the Gross Floor Area thresholds set forth in Sections 19.23 and 19.23.1 above.

19.23.3 Phased Project. Nothing in this Section 19.20 shall prohibit the Planning Board from granting a special permit for a phased project to be built over an extended period of time, which period shall be defined in the permit, provided sufficient information is available in the application to permit the Board to make the findings required.

19.23.4 Special Permit Thresholds Exemptions. Construction of a new building or a change of use that has been granted a Planning Overlay Special Permit (IPOP), under the provisions of Section 11.500 of this Ordinance in effect from July 1, 1998 through October 2, 2000 (Ordinance # 1209 and subsequent amendments), shall not be subject to this Section 19.20. However, any change of use in the authorized building subsequent to occupancy as authorized under the provisions of a Section 11.500 special permit, shall require the issuance of a Project Review Special Permit under this Section 19.20 where the proposed new use exceeds the relevant threshold established in Table 1.

19.24 Application Procedures. An application for the Project Review Special Permit shall be made to the Planning Board. The Application shall consist of the following materials:

(1) Planning Board Special Permit Application Form. The application shall include all required plans and narrative statements. The site plan and other plans, elevations and drawings shall clearly show: (1) the access and egress points for all forms of travel to the site, (2) the location of adjacent bus and transit stops, (3) the schematic design of proposed mechanical equipment, and (4) the architectural screening treatment proposed for that mechanical equipment. The proponent shall provide perspectives of the proposed development, including mechanical equipment, from all critical viewpoints.

(2) Traffic Study. Where the use thresholds established in Table 1 are met or exceeded, the application shall include a traffic study with a geographic and functional scope determined by the Traffic, Parking and Transportation Department (TPTD) to be appropriate to the location of the project. In general, the study shall review intersections where the project will have significant and measurable impact. The TPTD shall issue a certification to the applicant within twenty-one (21) days of its submission that the traffic study has been done in a complete and reliable manner. Where that certification is denied, the applicant may revise the information in the traffic study and resubmit it; a certification of the revised study shall be issued or denied by the TPTD within fourteen (14) days of the resubmission of material.

Based on guidelines established by TPTD, the traffic study shall include a narrative discussion of (a) the nature and quantity of vehicles traveling to the site including, in addition to passenger cars, service, delivery and other commercial vehicles, (b) the likely impact of such vehicular traffic on abutters, abutting streets and nearby residential streets, including on-street parking behavior, (c) the physical nature of pedestrian and bicycle access to the site and the quantity of
movements anticipated for each, and (d) an analysis of the crash history at intersections within the study area. The study shall identify parking and transportation demand management measures and other mitigation measures proposed to ameliorate any adverse traffic impacts identified in the study.

(3) Tree Study. A Tree Study, certified complete by the City Arborist, as required by the Tree Protection Ordinance of the City of Cambridge, Chapter 8.66.

(4) Urban Design Objectives Narrative. The application shall include a narrative description of how the proposal addresses each of the seven Urban Design Objectives set forth in Section 19.30. In addition the applicant shall comment specifically on the following: (a) the design and location of proposed mechanical equipment, including HVAC equipment, as well as a strategy for possible future expansion, if relevant, (b) location and operation of trash storage and removal systems, (c) location and operation of loading facilities, (d) measures taken to minimize the negative visual and noise impacts of such facilities on abutters, and (e) the provision in the building and site design to accommodate pedestrian, bicycle and transit access.

(5) Sewer Service Infrastructure Narrative. The application shall include a report by the applicant detailing the anticipated impact of the project on the city’s sanitary, stormwater, and combined sewer infrastructure. It shall indicate the adequacy of the preliminary site plan in meeting city, state, and federal requirements or established standards for implementation of best management practices for stormwater management and the likely improvements to infrastructure necessary to accommodate the impacts of the proposed project. Where such determinations cannot be made at the time of application, the report shall indicate what investigations must be undertaken by the applicant to make such determination, their anticipated costs, and the schedule for their completion. The applicant shall provide certification that this report has been submitted to the Department of Public Works.

(6) Water Service Infrastructure Narrative. The application shall include a report by the applicant detailing the anticipated impact of the project on the city’s water delivery infrastructure and supply. It shall indicate the likely improvements to infrastructure necessary to accommodate the identified impacts. Where such determinations cannot be made at the time of application, the report shall indicate what investigations must be undertaken by the applicant to make such determination, their anticipated costs, and the schedule for their completion. The applicant shall provide certification that this report has been submitted to the Water Department.

(7) Noise Mitigation Narrative. The application shall include a report detailing how the project shall conform to the requirements of the Cambridge Noise Ordinance. The report shall indicate the approaches to be adopted by the applicant in minimizing the impact of noise from the project on neighbors. When a project
19.25 Review Criteria. In granting a special permit under this Section 19.20 the Planning Board shall make the following findings.

19.25.1 Traffic Impact Findings. Where a Traffic Study is required as set forth in Section 19.24 (3) above the Planning Board shall grant the special permit only if it finds that the project will have no substantial adverse impact on city traffic within the study area as analyzed in the Traffic Study. Substantial adverse impact on city traffic shall be measured by reference to the traffic impact indicators set forth in Section 19.25.11 below.

In areas where the Planning Board determines that area-specific traffic guidelines have been established in the Ordinance, the Board recognizes written agreements between project proponents and the City dealing with transportation mitigation strategies.

19.25.11 Traffic Impact Indicators. In determining whether a proposal has substantial adverse impacts on city traffic the Planning Board shall apply the following indicators. When one or more of the indicators is exceeded, it will be indicative of potentially substantial adverse impact on city traffic. In making its findings, however, the Planning Board shall consider the mitigation efforts proposed, their anticipated effectiveness, and other supplemental information that identifies circumstances or actions that will result in a reduction in adverse traffic impacts. Such efforts and actions may include, but are not limited to, transportation demand management plans; roadway, bicycle and pedestrian facilities improvements; measures to reduce traffic on residential streets; and measures undertaken to improve safety for pedestrians and vehicles, particularly at intersections identified in the Traffic Study as having a history of high crash rates.

The indicators are: (1) Project vehicle trip generation weekdays and weekends for a twenty-four hour period and A. M. and P.M. peak vehicle trips generated; (2) Change in level of service at identified signalized intersections; (3) Increased volume of trips on residential streets; (4) Increase of length of vehicle queues at identified signalized intersections; and (5) Lack of sufficient pedestrian and bicycle facilities. The precise numerical values that will be deemed to indicate potentially substantial adverse impact for each of these indicators shall be adopted from time to time by the Planning Board in consultation with the TPTD, published and made available to all applicants.

19.25.2 Urban Design Findings. The Planning Board shall grant the special permit only if it finds that the project is consistent with the urban design objectives of the city as set forth in Section 19.30. In making that determination the Board may be guided by or make reference to urban design guidelines or planning reports that may have been developed for specific areas of the city and shall apply the standards herein contained in a reasonable manner to nonprofit religious and educational organizations in light of the special circumstances applicable to nonprofit religious and educational activities.

19.30 Citywide Urban Design Objectives
The following urban design objectives are intended to provide guidance to property owners and the general public as to the city’s policies with regard to the form and character desirable for new development in the city. It is understood that application of these principles can vary with the context of specific building proposals in ways that, nevertheless, fully respect the policies’ intent. It is intended that proponents of projects, and city staff, the Planning Board and the general public, where public review or approval is required, should be open to creative variations from the detailed provisions presented in this Section as long as the core values expressed are being served. A project need not meet all the objectives of this Section 19.30 where this Section serves as the basis for issuance of a special permit. Rather the permit granting authority shall find that on balance the objectives of the city are being served. Nor shall a project subject to special permit review be required to conform to the Required Building and Site Plan Requirements set forth in Section 11.50.

Further indicators of conformance with these policy objectives shall be found in planning documents and plans developed for specific areas of the city or the city as a whole, to the extent that they are not inconsistent with the objectives set forth in this Section 19.30. These documents include the Harvard Square Development Guidelines, the Central Square Action Plan, the Central Square Development Guidelines, the North Massachusetts Avenue Urban Design Guidelines Handbook, the University Park at MIT Urban Design Guidelines, the North Point Policy Plan and Design Guidelines, the Cambridge Institutional Growth Management Plan, the East Cambridge Riverfront Plan, the Eastern Cambridge Plan, the Eastern Cambridge Design Guidelines, the Alewife Revitalization, Alewife Urban Design Study Phase II and its Draft update of 1991, and Toward a Sustainable Future: Cambridge Growth Policy Document.

19.31 New projects should be responsive to the existing or anticipated pattern of development. Indicators include:

(1) Heights and setbacks provide suitable transition to abutting or nearby residential zoning districts that are generally developed to low scale residential uses.

(2) New buildings are designed and oriented on the lot so as to be consistent with the established streetscape on those streets on which the project lot abuts. Streetscape is meant to refer to the pattern of building setbacks and heights in relationship to public streets.

(3) In mixed-use projects, uses are to be located carefully to respect the context, e.g. retail should front onto a street, new housing should relate to any adjacent existing residential use, etc.

(4) Where relevant, historical context are respected, e.g. special consideration should be given to buildings on the site or neighboring buildings that are preferably preserved.

19.32 Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings. Indicators include:
(1) Ground floors, particularly where they face public streets, public parks, and publicly accessible pathways, consist of spaces that are actively inhabited by people, such as retail stores, consumer service businesses and restaurants where they are allowed, or general office, educational or residential uses and building lobbies. Windows and doors that normally serve such inhabited spaces are encouraged to be a prominent aspect of the relevant building facades. Where a mix of activities are accommodated in a building, the more active uses are encouraged facing public streets, parks and pathways.

In commercial districts, such active space consists of retail and consumer service stores and building lobbies that are oriented toward the street and encourage pedestrian activity on the sidewalk. However, in all cases such ground floor spaces should be occupied by uses (a) permitted in the zoning district within which the building is located, (b) consistent with the general character of the environment within which the structure is located, and (c) compatible with the principal use for which the building is designed.

(2) Covered parking on the lower floors of a building and on-grade open parking, particularly where located in front of a building, is discouraged where a building faces a public street or public park, and publicly accessible pathways.

(3) Ground floors should be generally 25-50% transparent. The greatest amounts of glass would be expected for retail uses with lesser amounts for office, institutional or residential use.

(4) Entries to buildings are located so as to ensure safe pedestrian movement across streets, encourage walking as a preferred mode of travel within the city and to encourage the use of public transit for employment and other trips. Relating building entries as directly as possible to crosswalks and to pathways that lead to bus stops and transit stations is encouraged; siting buildings on a lot and developing site plans that reinforce expected pedestrian pathways over the lot and through the district is also encouraged.

(5) Pedestrians and bicyclists are able to access the site safely and conveniently; bicyclists should have, secure storage facilities conveniently located on-site and out of the weather. If bicycle parking is provided in a garage, special attention must be aid to providing safe access to the facilities from the outside.

(6) Alternate means of serving this policy objective 19.32 through special building design, siting, or site design can be anticipated where the building form or use is distinctive such as freestanding parking structures, large institutional buildings such as churches and auditoriums, freestanding service buildings, power plants, athletic facilities, manufacturing plants, etc.

19.33 The building and site design should mitigate adverse environmental impacts of a development upon its neighbors. Indicators include:
(1) Mechanical equipment that is carefully designed, well organized or visually screened from its surroundings and is acoustically buffered from neighbors. Consideration is given to the size, complexity and appearance of the equipment, its proximity to residential areas, and its impact on the existing streetscape and skyline. The extent to which screening can bring order, lessen negative visual impacts, and enhance the overall appearance of the equipment should be taken into account. More specifically:

(a) Reasonable attempts have been made to avoid exposing rooftop mechanical equipment to public view from city streets. Among the techniques that might be considered are the inclusion of screens or a parapet around the roof of the building to shield low ducts and other equipment on the roof from view.

(b) Treatment of the mechanical equipment (including design and massing of screening devices as well as exposed mechanical elements) that relates well to the overall design, massing, scale and character of the building.

(c) Placement of mechanical equipment at locations on the site other than on the rooftop (such as in the basement), which reduces the bulk of elements located on the roof; however, at-grade locations external to the building should not be viewed as desirable alternatives.

(d) Tall elements, such as chimneys and air exhaust stacks, which are typically carried above screening devices for functioning reasons, are carefully designed as features of the building, thus creating interest on the skyline.

(e) All aspects of the mechanical equipment have been designed with attention to their visual impact on adjacent areas, particularly with regard to residential neighborhoods and views and vistas.

(2) Trash that is handled to avoid impacts (noise, odor, and visual quality) on neighbors, e.g. the use of trash compactors or containment of all trash storage and handling within a building is encouraged.

(3) Loading docks that are located and designed to minimize impacts (visual and operational) on neighbors.

(4) Stormwater Best Management Practices and other measures to minimize runoff and improve water quality are implemented.

(5) Landscaped areas and required Green Area Open Space, in addition to serving as visual amenities, are employed to reduce the rate and volume of stormwater runoff compared to pre-development conditions.

(6) The structure is designed and sited to minimize shadow impacts on neighboring lots, especially shadows that would have a significant impact on the use and enjoyment of adjacent open space and shadows that might impact the
operation of a Registered Solar Energy System as defined in Section 22.60 of this Zoning Ordinance.

(7) Changes in grade across the lot are designed in ways that minimize the need for structural retaining walls close to property lines.

(8) Building scale and wall treatment, including the provision of windows, are sensitive to existing residential uses on adjacent lots.

(9) Outdoor lighting is designed to provide minimum lighting and necessary to ensure adequate safety, night vision, and comfort, while minimizing light pollution.

(10) The creation of a Tree Protection Plan that identifies important trees on the site, encourages their protection, or provides for adequate replacement of trees lost to development on the site.

19.34 Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply system, and sewer system. Indicators include:

(1) The building and site design are designed to make use of water-conserving plumbing and minimize the amount of stormwater run-off through the use of best management practices for stormwater management.

(2) The capacity and condition of drinking water and wastewater infrastructure systems are shown to be adequate, or the steps necessary to bring them up to an acceptable level are identified.

(3) Buildings are designed to use natural resources and energy resources efficiently in construction, maintenance, and long-term operation of the building, including supporting mechanical systems that reduce the need for mechanical equipment generally and its location on the roof of a building specifically. The buildings are sited on the lot to allow construction on adjacent lots to do the same. Compliance with Leadership in Energy and Environmental Design (LEED) certification standards and other evolving environmental efficiency standards is encouraged.

19.35 New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically. Indicators include:

(1) New educational institutional construction that is focused within the existing campuses.

(2) Where institutional construction occurs in commercial areas, retail, consumer service enterprises, and other uses that are accessible to the general public are provided at the ground (or lower) floors of buildings. Where such uses are not suitable for programmatic reasons, institutional uses that encourage active pedestrian traffic to and from the site.
(3) In large, multiple-building non-institutional developments, a mix of uses, including publicly accessible retail activity, is provided where such uses are permitted and where the mix of uses extends the period of time the area remains active throughout the day.

(4) Historic structures and environments are preserved.

(5) Preservation or provision of facilities for start-up companies and appropriately scaled manufacturing activities that provide a wide diversity of employment paths for Cambridge residents as a component of the development; however, activities heavily dependent on trucking for supply and distribution are not encouraged.

19.36 Expansion of the inventory of housing in the city is encouraged. Indicators include:

(1) Housing is a component of any large, multiple building commercial development. Where such development abuts residential zoning districts substantially developed to low-scale residential uses, placement of housing within the development such that it acts as a transition/buffer between uses within and without the development.

(2) Where housing is constructed, providing affordable units exceeding that mandated by the Ordinance. Targeting larger family-sized middle income units is encouraged.

19.37 Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city. Indicators include:

(1) On large-parcel commercial developments, publicly beneficial open space is provided.

(2) Open space facilities are designed to enhance or expand existing facilities or to expand networks of pedestrian and bicycle movement within the vicinity of the development.

(3) A wider range of open space activities than presently found in the abutting area is provided.

19.40 Citywide Advisory Development Consultation Procedures

19.41 General Purpose

This Section 19.40 provides the opportunity for City staff and the general public (1) to review and comment on development proposals prior to the formulation of final plans and before the issuance of a building permit and (2) to determine compliance with the zoning requirements applicable to the development. Each application for a building permit for one of the categories of development specified in Sections 19.42 and 19.43 shall be accompanied by a written certification from the Cambridge Community Development Department indicating that the applicant has participated in the Development Consultation
Procedure specified in this Section 19.40, for the proposal for which the permit is being sought. In each instance where the application for a building permit occurs more than six (6) months after the consultation session, the Community Development Department shall additionally certify to the Superintendent of Buildings whether the plans submitted for a building permit are consistent with those reviewed at the consultation session, and if not how they differ. Unless otherwise indicated elsewhere in the Zoning Ordinance, the Community Development Department shall conduct the consultation session. No certification pursuant to provisions of this Section 19.40 shall be deemed to be in lieu of the responsibility of the Superintendent of Buildings to enforce all provisions of the Zoning Ordinance - each Certificate of Compliance is advisory to the applicant and the Superintendent of Buildings.

19.41.1 Purpose of the Small Project Review Procedure. In zoning districts designated as Areas of Special Planning Concern, the advisory Small Project Review is intended to provide an informal forum within which the small details of a proposal can be reviewed by city staff. Small, incremental changes to a building, a streetscape, or a neighborhood can over time significantly alter the character and quality of the urban environment. This procedure provides an opportunity for city staff to influence the design of such small details in order to encourage that the changes are consistent with city urban design objectives, individually and as they accumulate overtime.

19.41.2 Purpose of the Large Project Review Procedure. In zoning districts designated as Areas of Special Planning Concern, the advisory Large Project Review serves the same purpose as the Small Project Review for somewhat larger changes in the environment with somewhat greater impacts on the public realm. The Large Project Procedure provides the opportunity for abutters and the general public, as well as city staff, to review and make comment on the proposal at the consultation session.

19.42 Small Project Review Procedure

19.42.1 Applicability of Small Project Review Procedure. For those zoning districts identified in Section 19.46 as Areas of Special Planning Concern, the following types of development proposals shall be subject to the Small Project Development Consultation Procedure (unless the regulations for an individual Area of Special Planning Concern provide for specific exceptions or additional types):

(1) construction of any new building having a gross floor area of less than two thousand (2,000) square feet;

(2) construction of any other new structure having a floor area of less than two thousand (2,000) square feet;

(3) any exterior building alteration increasing gross floor area by one hundred (100) square feet or more

(4) construction of five or more parking spaces, whether on grade or in a structure;

(5) erection of a sign;
(6) any other exterior building alteration facing a street but not including painting, brick repointing or masonry repairs, building cleaning, gutter replacement or similar routine repair, replacement, or maintenance.

19.42.2 Application for a Small Project Review. Prior to application for a building permit, the applicant shall contact the Community Development Department and request a development consultation session. Upon making such a request, the applicant shall present for review such written or graphic materials necessary to give a reasonably complete, though not necessarily detailed, indication of the nature and scope of the development proposal. The consultation session shall occur no later than five working days after the request for such a consultation.

19.42.3 Conduct of the Small Project Review Consultation. In most cases the Community Development Department staff person will complete the review and issue the certification of the compliance with this Section 19.42 at the end of the consultation session. However, if questions arise during the session suggesting the need for advice and assistance of other city departments or others, the development proposal materials may be kept for further review. However, the final staff comments and the issuance of the Certificate of compliance shall be made within five (5) business days of the consultation session.

The failure of the Community Development Department to hold the consultation session or to issue the Certificate of Compliance within the review time periods specified in this Section 19.42.3 shall not prevent an applicant for a building permit from receiving such permit after such time period has expired. The specified review period may be extended by mutual agreement of the applicant and the Community Development Department.

19.43 Large Project Review Procedure

19.43.1 Applicability of Large Project Review Procedure. For those zoning districts identified in Section 19.46 as Areas of Special Planning Concern, any development proposal involving the construction of a new building or new structure or an alteration of an existing building or structure that increase the gross floor by two thousand (2,000) square feet but less than twenty-five thousand (25,000) square feet.

19.43.2 Application for a Large Project Review. Prior to application for a building permit, the applicant shall submit the following materials to the Community Development Department for its review. The written and graphic materials listed below shall give a reasonably complete indication of the nature and scope of the development proposal. Each of the following shall be submitted as appropriate to the proposal:

(1) A site plan indicating the general location and boundaries of the lot, major anticipated changes in natural features, existing and proposed buildings, publicly beneficial open space and/or useable beneficial open space and/or private open space, existing and proposed curb cuts, off street parking areas, loading and service facilities, and generalized landscaping scheme or other anticipated treatment of open spaces.
(2) Cross section(s), generalized floor plans and other diagram(s) indicating the anticipated locations of various land uses within the building and on the site and major pedestrian pathways.

(3) Architectural elevations or sketches indicating anticipated facade treatment along public ways including the proposed entrances, fenestration, and signage.

(4) A summary indicating compliance with applicable zoning requirements.

19.43.3 Conduct of the Large Project Review Consultation. Abutters and representatives of various agencies and interest groups shall be invited to participate in a consultation session for Large Project proposals submitted for review in accordance with Section 19.43.2. The Community Development Department shall give notification of any scheduled development consultation to each abutting property owner and to any individual or organization who each year files with the Community Development Department a written request for such notification, or to any other individual or organization the Department may wish to notify.

Within ten (10) business days of submittal of the application documents, the Department will schedule and hold a consultation session with the applicant or his designee and any parties listed in this Section 19.43.3. Within ten (10) days of the consultation session, the Community Development Department shall issue to the applicant written comments on the development proposal as expressed by City staff and others in attendance, which shall constitute the Certificate of Compliance.

The Community Development Department may seek the advice and assistance of other City departments and of the organizations given notice of the consultation procedure in reviewing a development proposal.

The failure of the Community Development Department to hold the consultation session or to issue the Certificate of Compliance within the review time period specified in this Section 19.43.3 shall not prevent an applicant for a building permit from receiving such permit after such time period has expired. The specified review period may be extended by mutual agreement of the applicant and the Community Development Department.

19.43.4 Review Criteria and Required Findings of the Large Project Review Procedure. In reviewing each application, the Community Development Department shall:

(1) Evaluate the proposal for general compliance with zoning requirements, for consistency with City development guidelines prepared for the proposal area, for appropriateness in terms of other planned or programmed public or private development activities in the vicinity and for consistency with the Citywide Urban Design Objectives set forth in Section 19.30. The Department shall consider the proposal in terms of the specific and general impact of the use and/or dimensions proposed therein on the area of special planning concern and on adjacent neighborhoods and shall further take account of the following considerations: scale, bulk, density, aesthetic qualities, land use, traffic impacts and other
functional characteristics; parking and loading; and impact on public services and facilities.

(2) Make recommendations in a written report to the applicant including general approval or disapproval of the proposal and in connection therewith may suggest specific project adjustments and alterations to further the purposes of this Ordinance.

19.45 Waiver of Procedures. Where a special permit issued by the Planning Board is required for a proposed development, no separate Small or Large Project Review Procedure shall be required under the provisions of this Section 19.40.

19.46 Areas of Special Planning Concern. The following zoning districts shall be considered Areas of Special Planning Concern: Business A-1 and Business A-2 Districts, the Parkway Overlay District, the Kirkland Place Overlay District, the Harvard Square Overlay District, the Central Square Overlay District, The Cambridgeport Revitalization Development District, the Massachusetts Avenue Overlay District, Special District 12, Special District 13, Special District 14 and the Memorial Drive Overlay District, and the Prospect Street Overlay District.

19.50 Building and Site Plan Requirements

19.51 Applicability

19.51.1 Applicable Zoning Districts. This Section 19.50 shall apply in the following zoning districts:

(1) All Office, Business, and Industrial Districts and NP districts, and any Special District for which an office, business or industrial district serves as the underlying base regulation (SD-1, SD-3, SD-5, SD-7, SD-8, and SD-11).

2) Residence C-1A, C-2, C-2A, C-2B, C-3, C-3A, and C-3B districts, and any Special District for which any one of these residence districts serves as the underlying base regulation (SD-2, and SD-6) for a building or portion of a building within one hundred (100) feet of a public street.

19.51.2 Applicable Construction. The building design and site development requirements set forth in this Section 19.50 shall be required for the following construction projects:

(1) Any new building or structure of twenty-five thousand (25,000) gross square feet or more.

(2) Any addition of twenty-five thousand (25,000) gross square feet or more to an existing building or structure.

(3) Any alteration to the elements of a building of twenty-five thousand (25,000) gross square feet or more, or any alteration of its site, that is regulated by this Section 19.50, where the change is undertaken to accommodate a new use or uses or where the change is to a building constructed pursuant to a building permit certified to be in compliance with this Section 19.50 and where (a) the
alterations to accommodate the new use are proposed to the exterior of the building, or on the lot outside the building and (b) those alterations would increase the extent to which the building or lot's physical configuration would violate the requirements set forth in Section 19.50 to a greater extent than the existing configuration.

Where applicable zoning district regulations differ from the requirements of this Section 19.50, the stricter provisions shall apply.

A project that does not comply with the requirements of this Section 19.50 shall not receive a building permit until a Special Permit is granted by the Planning Board. The Planning Board shall grant such special permit only upon finding that the project is consistent with the Urban Design Objectives set forth in Section 19.30. Nothing in this Section 19.50 shall prevent an applicant, not wishing to conform to the requirements of this Section 19.50, from directly seeking a special permit from the Planning Board subject to consistency with Section 19.30.

Any application for a Building Permit for development subject to this Section 19.50 shall be accompanied by a Tree Study, certified complete by the City Arborist, as required by the Tree Protection Ordinance of the City of Cambridge, Chapter 8.66.

19.52 Heights and Setbacks. The provisions of this Section 19.52 shall not apply to Special District 8.

(1) For development on a lot abutting a lot in a residential zoning district having a more restrictive height limit, the cornice line of the principal wall plane facing the residential zoning district line shall not exceed by more than twenty (20) feet at any point the maximum height permitted in the residential zoning district. Any portion of the building rising above the cornice line shall be located below a forty-five (45) degree bulk control plane starting at ground level at the zoning district line, subject to the following provisions.

(a) Where the zoning district line lies within a lot, the bulk control plane shall begin at the lot line in the residential zoning district that divides the subject lot (including any intervening lots held in identical ownership but not part of the development lot and such lots located across the street) from another lot in different ownership.

(b) Where the zoning district line occurs within a public street, the provisions of this Section 19.52 shall apply but the bulk control plane shall be measured from the centerline of the street regardless of the location of the zoning district line.

(2) For development on a lot abutting a residential zoning district having more restrictive yard requirements, the yard requirements of the residential district shall apply to any portion of the development rising above the bulk control plane set forth in Paragraph (1) above. As in (1) above, where the zoning district line lies
within a lot, the bulk control plane shall begin at the lot line in the residential zoning district that divides the subject lot (including any intervening lots held in identical ownership but not part of the development lot) from another lot in different ownership. This Paragraph (2) shall not apply where the zoning district line lies within or across a street.

19.53 Location of Uses

(1) In mixed-use developments containing a residential component (Section 4.31 – Residential uses, excluding Hotel and Motel use), the housing shall be located on the lot adjacent to existing residential uses located on abutting lots or across a street or shall be located adjacent to an existing abutting residential zoning district, including a district located across a street.

(2) In mixed-use developments containing a retail component (Section 4.35 – Retail Business and Consumer Service Establishments), at least fifty (50) percent of the area devoted to retail uses shall be located fronting onto at least one of the public streets abutting the development. However, in multiple building developments where internal private streets open to the general public are created, retail uses may located on those private streets shall be deemed to meet the requirements of this Paragraph (2).

19.54 Historic Resources. No building permit pursuant to a Certificate of Compliance issued for a project subject to this Section 19.50 shall be issued until at least one of the following events has occurred:

(1) The project has received, where applicable, a Certificate of Appropriateness, Hardship, or non-applicability from the Cambridge Historical Commission under the provisions of M.G.L. Chapter 40C and/or Chapter 2.78, Articles I or III, Cambridge city Ordinances, or from a Neighborhood Conservation District Commission under Chapter 2.78, Article III.

(2) Where a building on the site has been determined by the Cambridge Historical Commission to be a Preferably Preserved Significant Building under the provisions of Chapter 2.78, Article II, Cambridge City Ordinances, or the six month demolition delay period has expired.

19.55 Landscaping

(1) The area between the principal wall plane of a building and a public street or public park, whether required or provided, shall be devoted to Green Area (as defined in Article 2.000), expansion of the adjacent public sidewalk, park area, or other landscaped area or paved pedestrian area and extending along the entire length of the lot facing the street or park. Areas devoted to motor vehicular use are prohibited from this area with the exception of access drives providing direct access to parking and service facilities located elsewhere on the site and which
shall be limited to a total of thirty (30) feet of width for any individual driveway for each one hundred (100) feet of lot frontage.

Where the front lot width is greater than three hundred (300) feet the provisions of this Paragraph shall only apply to that portion of the front yard extending beyond the side facades of the building, parallel to the front lot line or parallel to the adjacent park lot line, equal in length to the side yard setback(s) that would otherwise be required for the building in the district within which it is located.

(2) The green area required in Paragraph (1) above shall initially be located at the mean grade of the relevant public street or open space at the property line. Beyond that point, a change in grade that can be maintained permanently without structural support shall be permitted.

19.56 Pedestrian Environment. The portion of the ground floor of a building (defined as the first floor of a building located either at mean grade or no more than four feet above the mean grade of the building) and the floors above that face and are within one hundred (100) feet of a public street or directly abuts and is within one hundred (100) feet of a public park shall consist of space routinely occupied by people throughout normal business hours engaged in those activities for which the building is principally intended to accommodate, including, but not limited to, retail stores sales areas; consumer service businesses; general, professional and agency offices; institutional offices, classrooms and dormitories; building lobbies, residential units, manufacturing and research and development activities, etc. (but excluding specifically parking and loading facilities), subject to the following requirements.

(1) The actively used area shall have a depth of at least 20 feet, or the depth of the building if less.

(2) The facades shall consist of a minimum twenty-five (25) percent clear glass in total for the façade and at the ground floor subject to the following further provisions.

(a) At the ground floor; the minimum amount of clear glass shall be increased to fifty (50) percent of the area of the façade of the ground floor where retail and office uses are established (Section 4.34 – Office and Laboratory Uses, Paragraphs a-e, and Section 4.35 – Retail Business and Consumer Service Establishments). For purposes of this Section 19.56, the area of the façade of any given floor shall be measured vertically from the finished interior floor to the underside of the structural joists of the floor above.

(b) Where residential and dormitory uses are established, the minimum area of clear glass shall be reduced to twenty (20) percent of the entire façade, with no minimum requirement on the first floor.
(c) No minimum requirement shall be imposed for Theaters (Section 4.35 h), Place of worship [Section 4.56 a (1)], College or university athletic facility, auditorium, and theater facility [Section 4.56 c (4)], Fire and police stations [Section 4.56 g (2)], Municipal service facility [4.56 g (4)], Museum [4.56 g (3)], and Transformer station, substation [Section 4.32 g (2)].

(3) Where retail uses are established, each separately leased space shall have an individual public entrance onto the abutting street where any portion of the space fronts towards the street;

(4) At least one building entrance shall front on a street where the building abuts a street.

Where a freestanding parking garage is established, the requirements of this Section19.55 shall apply only to the ground floor of the structure. Exempt from this requirement shall be one two-way access drive to accessory parking located elsewhere on the lot and the area necessary to meet the minimum zoning required for loading facilities provided that no more than twenty-five (25) percent of the total length of any one façade is occupied by all such facilities.

19.57 Parking. On-grade surface parking shall not be placed in front of the principal front wall plane of a building, extended across the entire width of a lot, unless the parking is screened from view from the public street by other buildings. Where the lot width at the Principal Front Wall Plane of the building is greater than 300 feet, the provisions of this paragraph shall only apply to that portion of the front yard extending beyond the side facades of the building, parallel to the front lot line, equal in length to the side yard setback(s) that would otherwise be required for the building in the district within which it is located.

Where a lot abuts more than two streets, the provisions of this Section 19.57 shall apply to no more than two streets.

19.58 Mechanical Equipment, Refuse Storage, and Loading Areas. All mechanical equipment, refuse storage, or loading areas serving the building or its occupants that are (1) carried above the roof, (2) located at the exterior building wall or (3) located outside the building, shall meet the requirements listed below. Mechanical equipment includes, but is not limited to, ventilation equipment including exhaust fans and ducts, air conditioning equipment, elevator bulkheads, heat exchangers, transformers and any other equipment that, when in operation, potentially creates a noise detectable off the lot. The equipment and other facilities:

(1) Shall not be located within any required setback. Where no setback is required, it shall not be located closer than 10 feet to any property line or it shall be entirely contained within the building. This Paragraph (1) shall not apply to electrical equipment whose location is mandated by a recognized public utility.
(2) When on the ground, shall be permanently screened from view from adjacent public streets that are within 100 feet of the building, or from the view from abutting property in separate ownership at the property line. The screening shall consist of densely planted shrubs or trees equal or greater in height at the time of installation than the equipment or facilities to be screened, or a fence of equal or greater height that is comparable in quality to the materials used on the principal facades of the building, with no more than twenty-five (25) percent of the face of the fence open.

When carried above the roof, shall be permanently screened from view, from the ground, from adjacent public streets and any abutting residentially used lot or lots in a residential zoning district. The screening shall be at least 50% opaque, uniformly distributed across the screening surface.

(3) Shall be designed to meet all city, state and federal noise regulations, as applicable, as certified by a professional acoustical engineer if the Department of Inspectional Services deems such certification necessary.

(4) That handle trash and other waste, shall be contained within the building or screened as required in this Section 19.58 until properly disposed of.

19.59 Open Space. At least 15% of the lot shall consist of any combination of Green Area or Permeable Open Space as defined in Article 2.000. This requirement may be met on a lot held in the same ownership, provided the Open Space is located within 300 feet of the development lot and does not serve to meet the requirement of this Section 19.59 for any other development.

19.510 Green Building Requirements. The requirements of Section 22.20 of this Zoning Ordinance shall be met.