DRAFT





CITY OF CAMBRIDGE COMMUNITY DEVELOPMENT DEPARTMENT

November 30, 2018

# CONTENTS

# **1. INTRODUCTION**

# 2. DEFINITIONS

#### **3. SITE AND BUILDING ORGANIZATION**

Create human scaled urban blocks Frame Urban Space Articulate Urban Space Entries, access and utilities

### 4. BUILT FORM

Engage the multiple scales of the urban environment The Pedestrian Frontage Zone The Streetwall The Building top Tall Buildings Architectural Character Building types **Commercial Buildings** Industrial Buildings Residential buildings **Civic and Institutional Buildings** Parking garages

#### 5. OPEN SPACES

Open spaces and site design Streets and paths Parks Squares and Plazas **Privately Owned Public Spaces Environmental Comfort** Universal Access

# 6. ALEWIFE'S SUBDISTRICTS

Triangle Quadrangle **Shopping Center** 

# **1. INTRODUCTION**

These guidelines are meant to inform property owners, business owners, developers, architects, and the general public about the desired character and form of the Alewife District. They are intended to be used by the Planning Board, in their review of development projects in the Alewife District.

These guidelines reflect broad principles for how new developments should contribute to the character and vitality of Alewife. However, the guidelines are not intended to impose strict limitation on building form and style. Other creative design solutions or measures not articulated in these guidelines may also be utilized to achieve the same goals.

Section 19.30 of Cambridge's Zoning Ordinance sets forth the overall urban design principles by which all projects subject to review by the City are evaluated. The following guidelines along with the Alewife District Plan provide more specificity regarding the City's goals for Alewife's public realm and built form.

# DRAFT

# **2. DEFINITIONS**

# 2.1 BUILD-TO LINE

A line with which the exterior wall of a building in a development is required to coincide. (https:// www.law.cornell.edu/cfr/text/36/910.55)

# 2.2 SETBACK LINE

The line parallel to a parcel's front lot line, which demarcates the closest the building facade or elevation can be to the public way.

# 2.3 FACADE

The face or front of a building towards a street or other open place, especially the principal front (OED).

In architectural terms, facade implies a complementary relationship between the design of the building's elevation and the public space before it, the facade responding to the civic importance of the public space, and the public space being bounded and enriched by the geometry and surface development of the facade.

### 2.4 ВLOCК

A compact or interconnected mass of buildings, with no intervening spaces...the quadrangular mass of buildings included between four streets, or two avenues and two streets at right angles to each other (OED definition 14a).

In urban design, blocks have a reciprocal relationship to the public space around them, the constructed mass of the block contrasting with the spatial volume of the public spaces streets, parks or squares - that border them.

#### 2.5 PEDESTRIAN FRONTAGE ZONE

The building's ground floor, and on occasion its second floor, offering amenity, comfort, shelter and visual enrichment, and accommodating enlivening retail and active uses.

### **2.6 STREETWALL**

The line of vertical building surfaces facing a street. In commercial and retail districts, the streetwall 's ground and sometimes second floor are generally differentiated from the floors above, the former having a scale appropriate to the pedestrian experience, and sufficient transparency to establish a direct visual relationship between interior space and the public sidewalk.

# **3. SITE AND BUILDING** ORGANIZATION

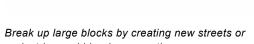
# **3.1 CREATE HUMAN-SCALED URBAN BLOCKS**

The organization of buildings and sites should reinforce the district's sense of place by creating meaningful and memorable public-spaces. Buildings should contribute to a human-scaled and pedestrian friendly public realm, one framed, defined, and enlivened by the massing, facades, and ground floor uses, and by the urban blocks that they constitute. The creation of walkable blocks, scaled to the pedestrian experience is of most importance.

#### GUIDELINES

- 1. New development and redevelopment of sites should break up large blocks and increase permeability by creating new streets, and pedestrian and bicycle connections.
- 2. Blocks should have a coherent perimeter, consisting of facades and elevations, along the streets, parks, and squares they border.
- 3. Massing of buildings and the geometry of floorplates should be arranged to fill out the block perimeters as designated by building setback lines recommended in the Envision Alewife Plan.
- 4. Building massing and geometry should be designed in coordination with those of adjoining buildings within the block to create coherently aligned streetwalls along public streets and other public open spaces.

# DRAFT



pedestrian and bicycle connections



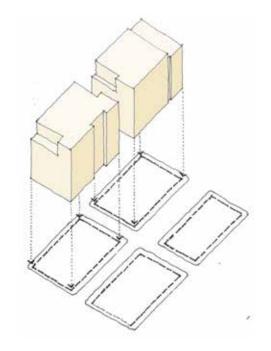
Mid-block pedestrian walkways enhance pedestrian connectivity and offer opportunities for active uses.

# **3.2 FRAME URBAN SPACE**

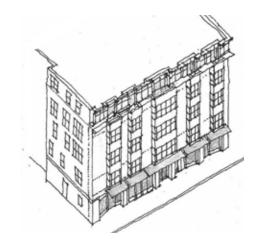
Building masses should be shaped and positioned to frame streets, parks, and squares as coherent and legible spaces. The specific tactics employed; in each case will vary according to building type, size, site, and context.

- 1. Create strong, continuous streetwalls that define and celebrate public open space.
  - Buildings should be sited parallel to the street, generally at the inner edge of sidewalks or along any setback lines recommended in the Envision Alewife Plan.
  - b. Streetwall facades addressing public streets or open spaces should be a minimum of three floors above grade or above the level of elevated sidewalks.
  - c. Building masses taller than 85' above grade should generally step back at that level. Where buildings face large open spaces such as Fresh Pond Reservoir, or arterial streets such as Alewife Brook Parkway, such setbacks may be at a higher level.
  - d. Developers of large properties should create a site massing plan that establishes build-to lines.

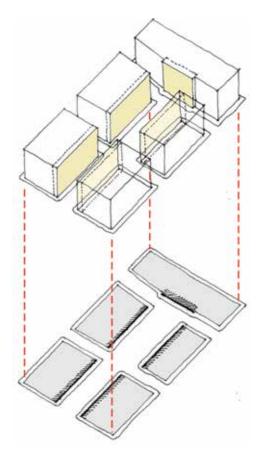
- 2. Depending on the street and building type, portions of buildings may be set back from the inner edge of sidewalks to allow for:
  - Building entrances, outdoor dining, and residential forecourts, courtyards etc. The minimum percentage of streetwalls that must be located on the build- to line should be in accord with the importance of the street.
  - b. Recessed retail or other entrances, recessed storefronts, loggias.
- 3. Projecting elements at second floors and above, such as balconies and bay windows, should be provided to enliven facades.
- 4. Pedestrian frontages should not project beyond the plane of the streetwall above.



Build-to lines (dashed) locate building facades to define streets and larger open spaces.



A variety of means, including scale, the use of materials, color, the amount and type of detail and articulation, and compositional formality vs. informality differentiate between front facade and side elevation to emphasize the civic importance of public space.



Define and celebrate important streets and other open spaces by addressing them with primary facades aligned according to the build-to line.



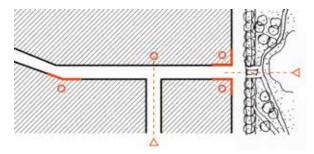
# 3.3 ARTICULATE URBAN SPACE

Building facades and massing should articulate urban space by emphasizing significant connections, junctions, and thresholds. Facades should provide sufficient consistency of form and pattern to establish clear and legible urban spaces, and sufficient variety of pattern and points of interest to enliven them.

#### GUIDELINES

- 1. For large buildings, massing should be broken down to enhance connections and avoid a monolithic appearance.
- 2. Building massing should be designed to minimize shadows on existing and proposed open spaces.
- 3. Facades and massing should be differentiated in response to the varied conditions of the site context. A combination of the following should be used:
  - a. Exceptional elements, located and designed to engage and reinforce views, axes, significant corners, building entrances, courtyards and other critical points in the district's public realm.
  - b. Relatively neutral facade elements serving as background to exceptional elements.

- 4. Facades and massing should respond to the design of adjoining buildings and to elements of the building's own structure or program as appropriate to their role in defining and shaping the public realm.
- 5. Facades and elevations should emphasize the difference between the types, sizes and character of streets, open spaces, or other conditions they address by differences in building massing, materials, color, fenestration, window to wall ratios, bay patterns, etc. on their different sides.

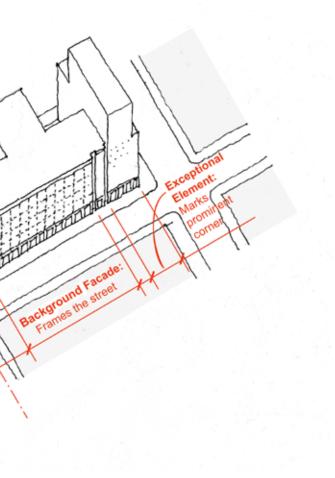


Locate exceptional or landmark elements to reinforce the spatial structure of the public realm. Create a sense of entry and arrival into parks and squares.

Massing and facades should define and enliven public space by combining consistency and variety, positioning background elements and unique motifs to emphasize significant locations in the district's network of streets and open spaces.



Differentiated color and modulated massing reduces the building's sense of bulk, while celebrating the street corner. Source: https://www.apartments.com/hanover-alewife-cambridge-ma/qsm8k3z/



# 3.4 ENTRIES, ACCESS, AND UTILITIES

Site access, building entries, and services/utilities should be designed and located to minimize intrusion on the public realm.

### GUIDELINES

#### **PEDESTRIAN ENTRIES**

- 1. Locate pedestrian entrances to engage and activate the streets and other public spaces.
  - a. Frequent entrances should be provided along public ways.
  - b. Retail entrances should be at block corners.
  - c. Lobbies for office, laboratory, and industrial buildings should generally be located mid-block.

#### **VEHICULAR ENTRIES AND DROP-OFFS**

- 2. Design and locate vehicular entrances, driveways and vehicle drop-offs to minimize their impact on the pedestrian environment.
  - a. Driveways and parking entrances should be located on side streets or alleys wherever possible.
  - b. Driveway widths should be minimized.
  - c. Driveways should be perpendicular to the street they connect to.
  - d. Curb cuts should be minimized, and shared wherever possible.
  - e. Privately owned shared driveways should be designed as streets, within the hierarchy of proposed street types.
  - f. Where fire lanes are required between buildings, they should be shared between adjoining lots and designed as streets or pedestrian/bicycle paths, depending on their connectivity within the overall street system.
  - drives/drop-offs should be g. Circular avoided.

#### LOADING AND SERVICING AREAS

- 3. Design and locate loading/servicing areas and parking entrances to create a highquality pedestrian environment.
  - a. Except in industrial areas, service and a. Preference should be given to housing mechanical and electrical equipment loading should be located out of sight from public streets or other open spaces. within buildings.
  - b. If electrical equipment must be located at loading areas and service roads serving grade, it should not be sited between the multiple buildings and multiple parcels. building and any public way, or forward of the principal façade. Such equipment secondary streets and alleys. should be concealed by plantings or an attractive enclosure. be
  - b. Where possible, consolidate off-street c. Locate entrances to service areas on d. Vehicular entrances should
  - c. Mechanical/utility rooms are not appropriately screened from public view appropriate along major streets, they and integrated into building forms to minimize visual impacts. They should be should be located on minor streets or on limited to secondary streets. the interiors of blocks.
  - e. Avoid loading/servicing 5. Electrical and data lines should be buried. entrances exceeding two bays or 30 feet wide on 6. For all new streets, locate utilities within public streets except in the industrial streets, not sidewalks to protect tree plantings subdistrict. from conflicts.
  - f. Any loading bays facing public streets should be provided with architectural doors designed to complement the overall facade composition.
  - g. Dumpsters, and loading access should be accessed from alleys internal to blocks, or rear or side streets.

#### UTILITIES

s	4.	Mechanical or electrical equipment, and gas
-		meters should not be visible or audible from
		public streets or open spaces.

# **4. BUILT FORM**

# **4.1 ENGAGE THE MULTIPLE** SCALES OF THE URBAN **ENVIRONMENT**

Buildings should respond to and mediate between the urban environment's wide range of scales: the intimate scale of the individual pedestrian, the scale of structural bays, the scale of the individual building, the scale of the street or square, and the scale of distant views from neighboring parks and major thoroughfares.

Depending on their heights, buildings should consist of up to three different, but interrelated zones. The specific characteristics of the zones, their relative size and importance, and the amount of differentiation between them, should vary depending on building type and site context.

In general, buildings should consist of three zones:

#### 1. Pedestrian Frontage Zone

The building's ground floor, and on occasion its second floor, offering amenity, comfort, shelter and visual enrichment, and accommodating enlivening retail and community programmatic uses.

#### 2. Streetwall

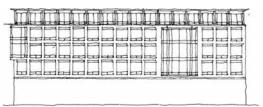
The 3 to 5 floors above the pedestrian zone, shaping and defining adjoining urban spaces and accommodating the bulk of the building's program.

#### 3. Building top

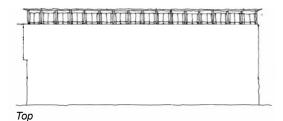
Depending on building type, it may range from a cornice or simple parapet at the upper edge of the streetwall, to a recessed top floor or assemblage of penthouses.

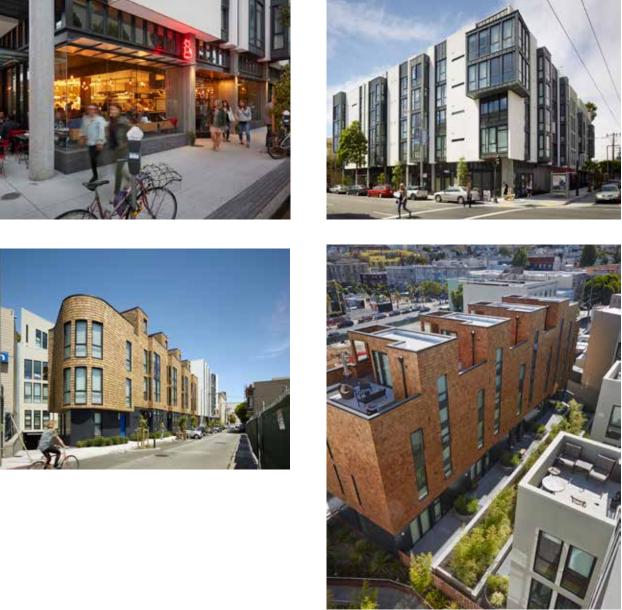


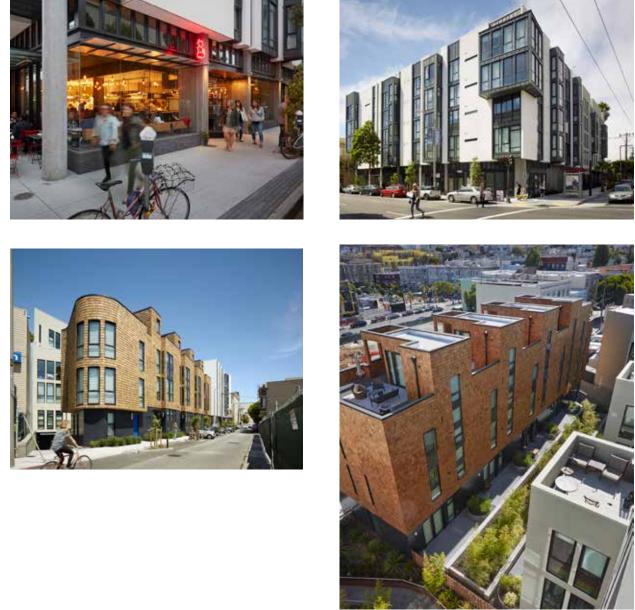
Pedestrian Frontage Zone











Built form mediates between the scale of the pedestrian, the building, the street or square, and the skyline. Source: https://www.dbarchitect.com/project\_detail/160/300%20Ivy.html

# 4.1.1 THE PEDESTRIAN FRONTAGE ZONE

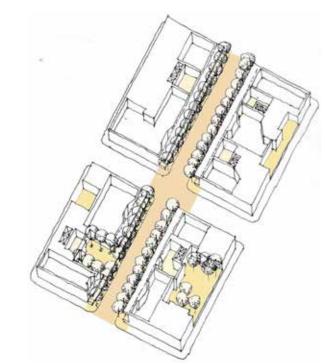
The pedestrian frontage zone provides shelter, accessibility, and visual interest at the pedestrian scale and accommodates active uses to enliven the district's streets and squares.

#### GUIDELINES

- 1. Where possible, buildings should engage, define and animate the pedestrian realm with active uses, such as retail, restaurants, live/ work units, flexible office space, and amenity spaces and community space in residential buildings.
- 2. The pedestrian frontage zone should incorporate a variety of facade treatments to create a visually rewarding and intimate pedestrian environment. Examples include:
  - a. angled display windows, frequent and recessed entrances
  - b. awnings and canopies
  - c. a high percentage of glazing
  - d. changes in mullion patterns, and incorporation of operable windows
  - e. varied materials or colors
  - f. higher-quality materials and detailing, with particular attention given to enhancing building entries and openings.

- 3. The design of first floor facades should directly engage the pedestrian realm by reducing the distinction between exterior and interior space to extending the effective public realm indoors and reveal the activity within:
  - a. On major public streets, including Smith Place, Wilson Road, Fawcett Street, Concord Ave, Cambridgepark Drive, Fresh Pond Parkway, Alewife Brook Parkway and Rindge Ave, first floor facades should be 60 to 75% glazed. For all other streets, 40 to 60% transparent glazing should be provided.
  - b. First floor facades of retail, restaurant, and office space should maximize transparency, particularly between 2 feet to 12 feet above the adjoining sidewalk.
  - c. Consider incorporating large operable doors/windows in sidewalk-side restaurant dining.
  - d. Storage rooms, toilets, restaurant kitchens, and other back-of-house facilities should be located away from primary streets and other public open spaces to maximize facade transparency.
  - e. Kitchen exhaust for food service uses should not negatively impact the ground level pedestrian experience.
  - f. Blank walls on primary streets exceeding 20' in length should be avoided.
  - g. First floors should have a minimum of 18' floor-to floor dimension.
  - First floor levels should be flush with or easily accessible from the adjoining grade level or elevated sidewalk.
  - i. Where courtyards occur at grade or on upper levels, create visual and physical connections to these spaces.

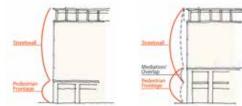
- 4. Where the facade expression of the pedestrian frontage zone includes the building's second floor, the second-floor facade should be visually connected with the ground floor facade and differentiated from the street wall zone or serve as a mediating element linking the ground floor and the streetwall zone.
- 5. Where buildings are set back from the sidewalk on streets where raised sidewalks are not required, low walls, combined with steps and ramps, should achieve the requisite grade change to first floor level. Sloped berms are discouraged.
- Where retail or community uses are not provided, first floor spaces on Smith Place, Wilson Road, Concord Ave, Cambridgepark Drive, and Alewife Brook Parkway should be designed to accommodate future active uses.
  - a. Leasable ground floor depths of at least 40 feet should be provided where possible.
  - b. First floor facades should be readily convertible to retail storefronts.
  - c. Venting and exhaust needs of future food service uses should be readily accommodated.
  - Interior power and HVAC that is zoned or easily convertible to enable convenient division and sublease of interior spaces to retail tenants should be provided.



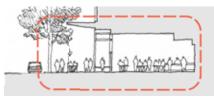
Passages, lobbies, and courtyards create permeable ground floors. Semi-public/semi-private retail and community spaces further expand the pedestrian realm.



Source: https://www.loopnet.com/Listing/10-Farnsworth-St-Boston-MA/13881605/



A distinct pedestrian frontage zone emphasizes the horizontal continuity of the pedestrian realm.



Transparent first floor facades extend the public space of the sidewalk into the semi-public/semi-private interior.

15

- 7. On designated streets, elevated sidewalks should provide direct pedestrian access to retail and other public uses whose first floor levels are elevated above street level. Such elevated sidewalks should constitute the primary focus of pedestrian life.
  - Elevated sidewalks should be continuous from building to building and parcel to parcel along streets.
  - b. Elevated sidewalks should be readily accessible from the sidewalk at street level. Steps and the starting points of ramps giving access to elevated sidewalks should occur at a maximum spacing of 100 feet along the ground level sidewalk.
  - c. The walking surface of elevated sidewalks, excluding access ramps and steps, should have a minimum width of 6 feet.
  - d. Steps and/or ramps should be provided where elevated sidewalks terminate, including at block corners, the side boundaries of parcels and ends of elevated sidewalks within parcels.
  - e. Design of elevated sidewalks should be sufficiently consistent to create a continuous pedestrian experience. Particular attention should be given to the design of railings and edge walls so that these become attractive elements of the public realm.



Canopies, awnings, recessed entrances and shopfronts, and open restaurant windows should shelter pedestrians and activate the street.

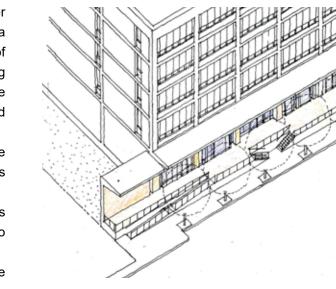


Where elevated sidewalks are provided, they should be wide enough and continuous enough to take precedence over ground level sidewalks.



Elevated sidewalks extend interior retail space into the public realm. Edge walls can be softened by landscaping.

- f. Where first phase buildings of larger anticipated developments within a parcel, do not extend for the full width of the street frontage, one of the following strategies should be used to ensure that the desired continuity of elevated sidewalks is achieved in the long term.
- g. Extend the elevated sidewalk beyond the initial building's frontage to the parcel's side lot line.
  - i. Provide the extended portions with railings and a canopy to match the building.
  - ii. If, or when, a second phase building is developed on the initial parcel, the extended portion of the elevated sidewalk should be provided with entrances and storefront windows as appropriate.
  - iii. When the building on the adjoining parcel is developed, its elevated sidewalk should smoothly join that of the first building.
- h. Terminate the elevated sidewalk at the end of the building's facade (including ramps or steps in the design), but agree to a commitment that when the neighboring building (either on the same parcel or the adjoining parcel) is constructed, the elevated sidewalk will be extended to smoothly join with the new building's elevated sidewalk.
- In any case, provide a transition area at the grade level sidewalk where the widths of the existing carriageway and sidewalk do not align with the width of the constructed ones.



Where buildings are set back from parcel side boundaries within blocks, one strategy to create continuity of the elevated sidewalk in the long term is to extend the elevated sidewalks, along with their rear walls and canopies to the property line.

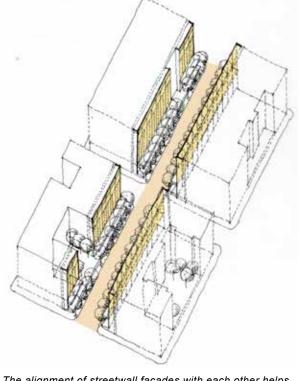
17

# 4.1.2 THE STREETWALL

Building streetwalls should create beautiful and memorable room-like urban places by spatially defining the three-dimensional volume of streets and other open spaces.

#### GUIDELINES

- Streetwall heights should be in harmony with the widths of the streets and squares they address, typically a minimum of approximately 5 floors. Taller streetwalls may be appropriate where buildings address large open spaces.
- 2. Streetwalls should be organized by a pattern of expressed structural bays, window openings, and/or surface articulation.
- 3. The overall configuration and pattern, the middle scale of bay design, and the details and nuances of fenestration and wall materials should be considered with respect to both distant views and contribution to the intimate scale of the pedestrian realm.
- 4. Differentiate between primary streets and open spaces on one hand, and secondary ones on the other hand by such means as differing levels of articulation and relief and changes of material or scale.
- 5. Incorporate focal elements in response to significant visual axes, to emphasize significant corners, to express changes in interior program, or to articulate primary building entrances.
- 6. Elaboration and differentiation of streetwalls' top floors should emphasize the room-like quality of the street and create an interesting roofline.
- 7. Fenestration for commercial and mixed-use buildings streetwalls should consist of punched windows.



The alignment of streetwall facades with each other helps define the space of the street.



Source: http://archive.nytimes.com/www.nytimes.com/interactive/2013/04/14/tmagazine/14well-moneo.html



Harmony in height, scale, materials, and a shared range of colors gives coherence to the street or square. Source: http://www.tcr-dev.com/10-farnsworth/

# 4.1.3 THE BUILDING TOP

#### GUIDELINES

- 1. The tops of buildings may be differentiated in massing or facade design from the typical streetwall floors to create a varied profile at the skyline, to frame the street as volumetric space, or to reflect the presence of mechanical equipment.
- Tops that are differentiated in material and design from the façades below should be stepped back a minimum of 5' from the plane of the building façade.
- Mechanical penthouses and other roofscape elements, should generally be designed integrally with the façade below, or as modulations of the pattern established below.
- 4. All rooftop mechanical equipment should be covered with a reflective, ventilated screen with a Solar Reflectance Index (SRI) of 45 to mitigate the urban heat island effect.



Top floors and penthouses may be differentiated to acco top at the skyline.

# **4.2 TALL BUILDINGS**

While Alewife will be predominately mid-rise in scale, some taller buildings may be incorporated in certain areas if and when a development bonus/ incentive is utilized. In the context of Alewife, a tall building is considered to be any building with a height greater than 85'.

Preferred locations for tall buildings are those that provide landmarks from distant vantage points, relate to larger open spaces in and around the district, and reinforce a sense of entry to Cambridge by increasing the visual scale at primary arterials. Possible locations might include: the north end of the East Shopping Center district, the east end of the Triangle, and Alewife Brook Parkway.

Tall buildings, where they occur, should enhance the quality and amenity of the public realm and sense of place by their massing and the design of façades.



Top floors and penthouses may be differentiated to accommodate mechanical equipment or to create an expressive building

and delicacy.

# GUIDELINES

- 1. Design and locate tall buildings to contribute to the district's skyline and emphasize the primary entries into Cambridge.
- 2. Break up the massing of tall buildings to reduce visual bulk.
- 3. Articulate tall buildings to avoid a monolithic appearance, and to emphasize slender, vertically-oriented proportions. Examples include:
  - a. Changes in plane, material, fenestration, color, etc. to break up visual bulk.
  - b. Varied forms to present different profiles to different vantage points.
- 4. Orient tall buildings so that their short façade faces the street, or open space, to minimize visual bulk.
- 5. Tall buildings should generally have a smaller floorplate than the streetwall floors below and should generally be stepped back from them.

The massing of large towers should be broken up to reduce their visual bulk. Proportions and carefully considered facades should create a sense of slenderness



Differentiation and vertical grain of tower facades helps reduce the sense of bulk.

# **4.3 ARCHITECTURAL** CHARACTER

Alewife's buildings should create an engaging pedestrian environment by combining diversity and variety with a sense that building facades define a coherent and meaningful public realm. Facades should enrich the district with visual interest and beauty and contribute to its sense of scale.

Facades addressing the public realm should be rich in architectural detail and relate to human dimensions. Facade elements should provide visual interest and a sense of quality and permanence.

# **GUIDELINES**

#### SCALE AND DETAIL

- 1. The overall form and detailed design of 6. Operable windows should be used in facades should emphasize human scale and residential and community buildings, and presence using well-proportioned features. where possible in commercial buildings. Examples include:
  - a. Punched windows, balconies, setbacks;
  - b. Size, rhythm and depth of windows that has regard to the scale of the building;
  - c. Projecting cornices;
  - d. Projecting bay windows; and
  - e. Expression of structural bays.

# DRAFT

- 2. Design details and embellishments should be used to soften, refine, and enrich facades. Examples include:
  - a. Masonry string-courses, lintels, sills, and trim:
  - b. Changes in plane to produce shadow lines: and
- c. Variations in texture and color; and the arrangements of joint patterns
  - 3. Key locations for detailed design focus are the pedestrian frontage zone, building entrances, corners, setbacks, top floors and silhouettes.

### FENESTRATION

- 4. Windows should be detailed and articulated to enrich the building's appearance.
- 5. Variations in mullion widths and pattern, incorporation of solid panels within openings; the articulation of wall surface at the periphery of openings, and the incorporation of shading elements, should be considered.
- 7. Strip windows should be avoided except in industrial buildings.







Patterns of fenestration and modulation of wall surface provide variety. Source: https://www.aiachicago.org/dea\_archive/2015/argonne-national-Source: https://www.nybooks.com/daily/2016/10/04/a-higher-form-of-high-riselaboratory-energy-sciences-building

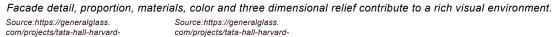


business-school/



business-school/





Source: https://www.taktl-llc.com/projects/75-125-binney-st/



A THE R P. LEWIS CO., LANSING, MICH.

1000 IIIII (1000)

# **4.4 BUILDING MATERIALS**

- 1. Buildings should be constructed of highquality durable materials, particularly at the lower levels experienced closely by pedestrians.
- 2. Sustainability considerations should be a factor in material choices.
- 3. In general, streetwall facades should be primarily masonry (brick, terracotta, stone, precast concrete, etc.). Areas of curtain wall, metal panels, or siding should be used for emphasis or contrast.
- 4. Warm and inviting color is encouraged.
- 5. Large areas of glass, such as bay windows or glazed curtain walls, spanning more than one floor, should be used deliberately, as elements of emphasis in contrast to solid wall surface; predominately glass facades are discouraged.
- 6. Vision glass should be clear, with high transparency and low reflectivity. Low iron glass with no reflective coatings on the first surface is preferred for ground floors.



Source: https://www.sheppardrobson.com/architecture/view/the-new-sciencebuilding-university-of-hertfordshire



Source: http://sergisonbates.com/en/projects/welcome-building-pudong



High-quality, durable facade materials contribute to a rich visual environment.

# **4.5 BUILDING TYPES**

Over time, Alewife will incorporate a broad range of building types - residential, office, research, light industrial, retail, institutional, etc. This variety of types and the uses accommodated will create a rich, livable urban environment. Due to their different characteristics, however, their Pedestrian, Streetwall, and Building Top zones will vary. Each building should contribute to the creation and visual enrichment of Alewife.

# 4.5.1 COMMERCIAL **BUILDINGS (OFFICE/** LABORATORY/RESEARCH)

#### **GUIDELINES**

- 1. Commercial lobbies should occupy no more than 25 feet of frontage.
- 2. Structural bays should be expressed and have a dimensional range of 20' to 30'.
- 3. Streetwalls should incorporate detail, subtle relief, and carefully considered patterns of fenestration at scales to create a visually engaging pedestrian environment.
- 4. Organize mechanical equipment and screening relative to building massing and facades; treat them as integral parts of the building design.
- 5. Interior lighting, especially in commercial buildings with late-night uses, should minimize light pollution that would affect residents of nearby housing or hotels.

# 4.5.2 INDUSTRIAL BUILDINGS

#### GUIDELINES

- 1. On Wilson Road, incorporate ground floor retail with entrances to retail at frequent intervals, and transparent storefronts.
- 2. If retail is not feasible, locate front office, reception areas, showroom components, or employee amenities such as dining facilities, on street frontages.
- 3. For large industrial buildings with multiple tenants provide numerous entries at sidewalk level to help activate the pedestrian environment.
- 4. Invest in the architecture of street-facing and publicly visible facades, while ensuring that these remain integrated with the design of the rest of the building.
- 5. Structural bays should be expressed.
- 6. Where surface parking cannot be avoided, locate parking areas at the interior of blocks, rather than at corner locations or those visible from major public streets.

# DRAFT



ground floor of industrial buildings renders them more

Source: https://www.bostonmagazine.com/property/2018/03/05/boston-

accessible and pedestrian-oriented

innovation-and-design-building/



A repetitive pattern of window openings on street facades that reflects the dimensions of structural bays can break down the scale of industrial buildings and create a human-scaled rhythm.

# 4.5.3 RESIDENTIAL BUILDINGS

The facades and massing of residential buildings should reflect a residential scale and character, and should also contribute to the definition and enrichment of the district's streets and other open spaces. Building massing, the design and positioning of facade elements, and landscape design should mediate between residential scale and the civic scale of the public realm.

- 1. Incorporate courtyards, open to the street, to provide semi-public open space and to facilitate ascent to the elevated residential ground floor level.
- 2. Locate residential lobbies directly on public streets, or on courtyards that open onto those streets.
- Incorporate ground floor units, including double height loft-style units, with individual entries along the length of street frontages to give the street a residential feel.
- 4. Where ground floor units are elevated above grade, create an elevated sidewalk in the building setback zone, accessed by ramps and steps from the level of the public sidewalk.
- In portions of street level facades that do not include residential units or retail space (e.g. common rooms and lobbies), incorporate 40 to 60 percent transparent glazing.

- In large residential buildings, a variety of means are encouraged to enliven facades and to mediate between the residential scale of individual units and the civic scale of the streetwall. Examples include:
  - a. Facades articulated into portions of varying widths by changes in plane, material, color, fenestration pattern, etc.
  - b. Vertically proportioned recesses.
  - c. Double height entries and lobby spaces.
  - d. Sheltered and human-scaled balconies.
- 7. Streetwall facades should be enriched by fine-grained detail. Examples include:
  - a. The design of balcony railings, including "Juliet balconies"
  - b. Shading devices.
  - c. Consideration of bond patterns in masonry, joint patterns in other wall materials, and mullion patterns in fenestration.
  - d. Warm and light colors to enhance residential character.
- 8. Differentiated and setback top floors should be provided to help create a sense of residential scale.
- 9. Where possible, terraces should be provided at building setbacks for private amenities and for green roofs and on-site water retention.

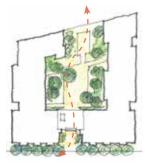




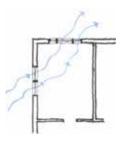
Residential forecourts offer semi-public semi-private open space



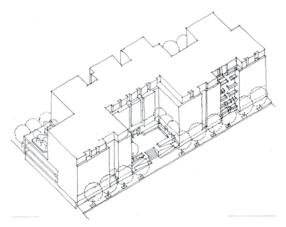
Streetwalls define the boundaries of public streets, and residential forecourts enrich it with variety and semi-private green space.



Forecourts and lobbies leading to courtyards give urban blocks a sense of porosity.



Massing should incorporate recesses ,courtyards and units with multiple corners to bring light deeper into building floorplates and to allow cross ventilation.



The contrast between consistently aligned streetwalls and more irregular and varied massing on the interiors of blocks and secondary streets reinforces the coherence of urban blocks and creates a rich pedestrian experience.



Facades should be composed of motifs hierarchically arranged to express residential scale and to also relate to the civic scale of the street or square they address.

Source: https://www.utiledesign.com/news/girard-wins-bsa-honor-award-fordesign-excellence/



At residential buildings with front setbacks, landscape should create thresholds of privacy while still allowing visual connection.

# 4.5.4 CIVIC AND INSTITUTIONAL BUILDINGS

As exemplars of civic purpose, the form and appearance of civic and institutional buildings may be more unique than other components of the built fabric. However, institutional buildings should maintain sufficient accord with the guidelines to reinforce and articulate the pattern of Alewife's public open spaces.

# **4.5.5 PARKING GARAGES**

# GUIDELINES

- 1. At ground level frontages, provide continuous retail or other public uses where possible.
- 2. Pedestrian stairs and lobbies should be highly glazed and visible to the public.
- Upper floors of parking garages should be wrapped in commercial or residential space where they face public streets or other public open spaces.
- 4. In locations where garages are visible, they should be provided with attractive facades that screen cars from view. Examples include combinations of solid walls, louvers, vegetation, and perforated metal.
- 5. Vehicular entrances should be unobtrusive and integrated into the design of the ground floor.
- 6. Sloped garage ramps should not be visible from public streets and open spaces.
- 7. Parking garages should be designed to accommodate alternative land uses in the future, if demand for parking declines.



Expressive forms are one means to symbolize civic or institutional importance

Source: https://www.greenengineer.com/new-events/2014/6/12/epma-eastboston-public-library-tour



Parking garages should be provided with facades to screen cars from view



Entrances to parking garages should be unobtrusive and be integrated into the design of ground floor facades.

Source: https://www.bestparking.com/boston-ma-parking/neighborhoods/ beacon-hill-parking/?view=map

29

# **5. OPEN SPACES**

# **5.1 OPEN SPACES AND SITE** DESIGN

Alewife's streets, squares and parks should be beautiful, safe, memorable, and engaging places for public use and enjoyment, defined and enriched by architecture and landscape design. As an interconnected system, these open spaces should constitute the district's public realm, organizing Alewife's built fabric, connecting subdistricts, and connecting to the surrounding areas.

As the district develops, its existing streets and open spaces should be improved and new ones, varied in character, dimension, and use, should be constructed. Landscape design, open space amenities and where possible, the uses of building ground floors should create engaging, programmatically rich, and continuous pedestrian environment.

Alewife's public open spaces should be visually and programmatically rich; coherent, legible spaces; varied in size and character; and accommodate a wide range of uses. In short, they should be public rooms at the scale of the city.

#### **GUIDELINES**

- 1. Concentrate the majority of green open space in parks, courtyards, and in the interiors of blocks, rather than in unusable front yard setback zones.
- 2. Each open space should contain a range of the following:
  - · Seating and other types of street furniture, canopy trees, water features, opportunities for multiple uses, exercise, play, events and food trucks.
- 3. The design of new open spaces should provide for solar access, sky views and protection from wind.
- 4. Works of art and their settings should work together harmoniously to humanize public open space at the pedestrian level.
- 5. Wayfinding signage should be provided in large open spaces to create direct and accessible connections.
- 6. Public bathrooms should be incorporated in high pedestrian traffic areas, based on an evaluation of need as the district develops.





Public spaces should accommodate a wide range of uses and foster connection and interaction.

Public open spaces should be framed by building facades. Landscape design and paths should integrate with the district's system of paths and streets.





# **5.2 STREETS AND PATHS**

New streets and paths should connect subdistricts and connect Alewife with nearby neighborhoods and parks. The street network should provide pedestrian and bicycle routes in addition to serving private vehicles and truck access. Alewife's streets should be safe, pleasant, and welcoming for pedestrians.

- 1. Streets should be designed with a series of parallel layers to link and mediate between the public way and private and semi-private courtyards and building interiors. Examples include:
  - Vehicular lanes, bicycle lanes, parallel parking lanes, curbs, sidewalks, street furniture, street trees, low walls, fences, low plantings, hedges, front yards, foundation planting, steps/stoop, and elevated sidewalks.

- 2. Street Trees should define space and shelter pedestrians with the following features:
  - a. Canopy trees, tall enough once mature to not obstruct ground level views.
  - b. Spaced 20' to 30' apart, and consistently aligned to provide legible and permeable spatial definition.
  - c. Located in the sidewalk, adjacent to the curb.
- 3. To slow vehicular traffic and facilitate pedestrian crossing, vehicular carriage ways should be no wider than necessary, and curb radii at intersections should be no larger than necessary.
- 4. Any on-street parking should be parallel.
- 5. Consider brick paving for sidewalks.
- Front fences, low walls, etc., in front yards on streets where front setbacks separate building ground floors from the public sidewalk should align wherever possible.
- 7. Chain link fencing should not be located along public streets.



Parallel parked cars and curbside street trees define the pedestrian sidewalk and separate pedestrians from traffic. Canopies provide shade and contribute to a sense of scale. Transparent storefronts extend the pedestrian zone into building interiors.



Multi-use paths enhance connectivity for pedestrians and bicyclists.



Where front yards are above the level of the sidewalk, retaining walls, rather than sloped berms, should demarcate the sidewalk as civic space.



Pedestrian streets and woonorfs enrich the public realm.



Sidewalks should accommodate pedestrian passage, street trees, street furniture, and where appropriate, seating for cafes and restaurants.



# 5.3 PARKS

Alewife is bordered by several large parks: Fresh Pond Reservoir, Daheny Park, and the Alewife Brook Reservation. These provide a multitude of options for passive and active recreation. Within the district itself, the primary need is for smaller scaled parks, and for connectivity to the adjoining resources.

As the district develops, new parks should be created, both as publicly owned and privately owned public open spaces. These parks should be beautiful, welcoming, offer connections to nature and provide opportunities for a wide range of activities including quiet enjoyment, recreation, active play, outdoor dining or picnicking, temporary markets, organized public events, and public gatherings.

# GUIDELINES

- 1. Parks should be primarily green, with paths located to promote pedestrian and bicycle access, and with broader areas of pavement in high traffic areas, and for vehicular use such as food trucks and markets.
- 2. Parks should incorporate multiple entrances. These entrances should celebrate the distinction between the space within the park from the public realm outside, while allowing clear passage.

- 3. Park design should combine spaces of differing scales to accommodate a wide range of activities, individuals and groups, and offer a variety of ways of being in the space, including:
  - a. Flexible open areas, generally lawns, suitable for a wide range of planned and impromptu activities.
  - b. Smaller scaled, more intimate spaces refuges protected from above or behind from the main flow of activity and/or environmental conditions - yet offering views of larger spaces and the activity in them.
- 4. Park edges should be defined by landscape elements that emphasize their spatial coherence and legibility. Examples include:
  - a. Allées of street trees, bordering paths, low plantings, low walls, benches, trellises, etc.
  - b. Such elements should generally be arranged in layers, framing central lawns with occupiable, permeable boundaries.
- 5. Play areas should be located near residential buildings where possible.



Parks should include broad clear open areas that can accommodate a multitude of uses. Source: https://dtrs.us/rest-eat/post-office-square-hidden-gem-park



Permeable bordering layers of landscape elements – trees, trellises, loggias, low plantings, paths, benches, etc. – frame open areas.

Source: https://colibriboston.wordpress.com/2015/07/29/boston-off-the-beatenpath-cheap-hidden-gems/



Celebrate park entrances to emphasize the sense of place.

Source: https://www.flickr.com/photos/davidwilson1949/33061420112/in/ photolist-SnwqmG-dknr3V-fsEW2U-GeS4dx-gctD8J-dknqYH-g86gEb-8nZLLp-



Flexible open areas can be activated by furniture.



Stormwater mitigation features should be integral parts of landscape design.



Kids enjoy protected play areas

# 5.4 SQUARES AND PLAZAS

Where appropriate, new squares and plazas should be created, either as privately owned public open spaces (POPS), or as city owned. Squares and plazas should be beautiful and welcoming places, foci of community life: predominately pedestrian, enlivened by outdoor dining, temporary markets, playful landscape features, public art, outdoor events and performances, and by the retail and community functions in the first floors of the buildings that frame them.

#### GUIDELINES

- Squares should be framed by building facades and bordered by streets on at least two sides, and wherever possible, active uses in the ground floors of the buildings around them.
- 2. Squares should be primarily paved to provide flexible open space for a variety of uses.
- As appropriate to their locations and character, squares, plazas, and courtyards should incorporate trees and other plantings, benches, water features, public art, outdoor seating areas for restaurants, bars, cafes, and the public, and areas for temporary retail – carts, trucks, stands, and tents.
- 4. Landscape design should complement the sense of spatial enclosure provided by the buildings that frame squares by incorporating bordering shade trees and other landscape elements.
- 5. Vehicular traffic along or through squares, where it occurs, should be slow.



Squares should be primarily paved to provide flexible open space for a variety of uses



Large open spaces should include a broad clear ground plane that accommodates a multitude of uses.

# 5.5 PRIVATELY OWNED PUBLIC SPACES

Privately-owned Public Open Spaces (POPS), including parks, squares, and courtyards, will be an important component of the district's matrix of open spaces.

Regardless of the specific arrangements for maintenance, funding, security, operation, etc., POPS should be perceived as fully public components of the urban environment, not as private plazas or green areas.

#### GUIDELINES

- 1. Entrances from public streets should be generous, direct, and unimpeded.
- Any fences and gates should be normally open and be integral parts of the design incorporated into architecture or landscape that frames the space - rather than divisively imposed.
- 3. POPS should be open from an hour before sunrise to an hour after sunset.
- 4. Where possible, POPS should be available for event programming.
- 5. Landscape design and the provision of functional amenities should be guided by the same considerations as publicly owned open spaces.

# DRAFT



Privately owned public spaces should be welcoming and integral to the district's public realm. Source: https://www.cambridgeredevelopment.org/pops

37

# **5.6 ENVIRONMENTAL** COMFORT

Alewife's open spaces and the buildings that frame them should provide safe and pleasant walkable places, with shade, shelter, and a connection to nature. Buildings should be designed to minimize undesirable environmental impacts.

# GUIDELINES

#### VEGETATION

1. Consideration should be given to preservation of existing, large trees including relocation wherever possible.

#### LIGHTING

- 2. Site lighting and exterior architectural lighting, should be designed according to Dark Sky principles, and should use fixtures approved by the International Dark Sky Association.
- 3. Exterior architectural lighting should be limited to the lower two floors of buildings.
- 4. Step lighting should be considered at steps and ramps to elevated sidewalks.

#### Noise

5. Mechanical noise should not impact the quality of life, either at ground level, or in residences. Design, select, locate, and acoustically screen equipment to protect neighbors from noise.

#### SHADOW, GLARE AND WIND

6. Where appropriate, analyze shadow, glare and wind impacts on the public realm and on surrounding buildings.



Consider site lighting in open space design Source: http://www.howeleryoon.com/projects/sean-collier-memorial

# **5.7 UNIVERSAL ACCESS**

Design the district's public and private outdoor spaces for universal access.

- 1. Provide wayfinding signage throughout the site and create direct accessible connections.
- 2. Ensure that streetscape elements do not conflict with accessible parking.
- 3. Incorporate "visitability" in measures residential buildings.



Incorporate wayfinding signage throughout the site. Source: http://www.omloopdesign.com/downtown-boston-1/

# 6. ALEWIFE'S SUBDISTRICTS

Alewife's subdistricts vary immensely in their uses, characteristics, potential for growth, connectivity, and environmental considerations. The following suggestions and guidelines address their unique qualities.

# THE TRIANGLE

 To create a walkable pedestrian environment and a more coherent street grid, privately owned driveways should be transformed into pedestrian friendly streets. (The ongoing project at 50 Cambridgepark Drive could be a model)

# THE QUADRANGLE

- As superblocks and large parcels are developed, create additional streets and connections within them to increase the connectivity and permeability of the district.
- When existing or new privately-owned streets are developed, they should be designed to increase the walkability of the District. Where appropriate use the proposed street types to guide design.
- Owners of adjoining parcels should coordinate on the location and design of fire lanes and service drives to maximize developable space and green space by sharing driveways rather than creating separate ones.

- Transform Concord Avenue into a pleasant urban boulevard, lined by street trees, generous pedestrian sidewalks, landscaped setbacks, substantial building facades building facades, and landscaped courtyards open to the Avenue.
- The proposed linear diagonal park should be framed with facades. Pathways should connect to paths and passages from the courtyards of the adjoining residential and mixed-use blocks.

# THE SHOPPING DISTRICT

- 1. Public squares should be created in both the eastern and western portions of the District.
- 2. Parking garage should be lined with retail/ commercial/residential space on their sides facing the public square.
- New development should allow for the future construction of a bridge to the Fresh Pond Apartment.
- 4. Consider incorporating pedestrian streets and/or woonerfs.
- Transform Fresh Pond Parkway into a pedestrian friendly street: lined by sidewalks, street trees, and building facades (as much as possible with ground floor program).