

Northborough Industrial Design Guidelines

Neighborhood Context and Compatible Design of Uses

■ SITE DESIGN

- Create a strong street wall by locating building frontages at the front property line or at the minimum required setback. Where additional setback is necessary, activate the area with a courtyard or “outdoor room” adjacent to the street by incorporating outdoor dining, seating, or water features, for example.
- Provide direct paths of travel for pedestrian destinations, e.g., between buildings, between parking areas and building entrances, and between buildings and public sidewalks or adjacent trail systems, where applicable. Create primary entrances for pedestrians that are safe and easily accessible.
- On multi-tenant sites, place buildings around a central common open space to promote safety and the use of shared outdoor areas.
- Provide bicycle lockers or racks near building entrances. In larger or multi-tenant sites, disperse bicycle parking facilities and locate them in convenient and visible areas close to primary building entrances.
- Provide adequate safeguards to control impacts resulting from toxic substances and release of airborne particles on adjacent residential uses.

■ BUILDINGS

- Orient buildings to maximize daylight opportunities and harvest natural light within interior work spaces. Utilize opportunities to provide operable clerestory windows to allow for ventilation and indirect lighting.
- Larger industrial buildings with multiple tenants should provide numerous entries to improve site design flexibility and options for building location.
- Provide a logical sequence of entry and arrival as part of the site’s design. Special entry treatments such as stamped or colored concrete and special planting and signage can be used to enhance entries and guide pedestrians.
- Entries should be designed according to simple and harmonious proportions in relationship to the overall size and scale of the building. Ensure that pedestrian entries are properly sized to provide shelter year-round.
- Ensure that the main entrance and entry approach can accommodate people of all mobility levels.

- Promote pedestrian activity by placing entrances at grade level or slightly above, and unobstructed from view from the public right-of-way.

■ **RELATIONSHIP TO ADJACENT PROPERTIES**

- Ensure that new buildings are compatible in scale, massing, style, or architectural materials with existing structures in the surrounding neighborhood. In older areas where industrial properties are being redeveloped, new developments should respect the character of existing buildings with regard to height, scale, style, and architectural materials.
- Create height and visual transitions between industrial districts and adjacent commercial and residential neighborhoods. Stepping back upper floors of industrial structures to match those of adjacent commercial or residential structures, and plant trees, shrubs, and vines to screen outdoor storage and odor or noise-generating functions of industrial uses.

High-Quality Architecture to Define the Character of the Industrial District

■ **PEDESTRIAN SCALE**

- Maintain a human scale rather than a monolithic or monumental scale. At entrances and openings, include overhead architectural features, such as awnings, canopies, trellises or cornice treatments that provide shade and reduce daytime heat gain, especially on south-facing facades.
- Differentiate the ground floor from upper floors. Changes in massing and architectural relief add visual interest and help to diminish the perceived height of buildings. In non-heavy industrial areas, incorporate windows on ground floors facing pedestrian paths of travel to improve the pedestrian experience.
- Use landscaping to add texture and visual interest at the street level. Landscaping should not create a barrier between pedestrians and the building frontage or views into buildings at the ground floor.

■ **BUILDING FAÇADE AND FORM**

- Vary and articulate the building façade to add scale and avoid large monotonous walls. Architectural elements such as entries, porticoes, cornices, and awnings should be compatible in scale with the building massing and should not be exaggerated or made to appear as a caricature of an historic architectural style.
- Where the building mass cannot be broken up due to unique use constraints, i.e. manufacturing or warehouse space, building walls should be articulated using texture, color, material changes, shadow lines, and other façade treatments.
- Architecturally integrate exposed industrial systems and equipment as a design option where practical.
- Organize massing to emphasize certain parts of the building such as entries, corners, and the organization of showroom or office spaces.

- Incorporate and alternate different textures, colors, materials, and distinctive architectural treatments that add visual interest while avoiding dull and repetitive façades.
- Incorporate windows and doors with well-designed trims and details as character-defining features to reflect an architectural style or theme consistent with other façade elements.
- Treat all façades of the building with equal architectural rigor, level of detail, and articulation.
- Integrate varied roof lines through the use of sloping roofs, modulated building heights, stepbacks, or innovative architectural solutions.
- Reinforce existing facade rhythm along the street where it exists by using architectural elements such as trim, material changes, bays, clerestory windows, and other design treatments consistent with surrounding buildings.

■ **BUILDING MATERIALS**

- Approach stylistic details in a manner that is true to a style of architecture or common theme.
- Apply trim, metal and woodwork, lighting, and other details in a harmonious manner, consistent with the proportions and scale of the building(s).
- Select building materials, such as trim and finishes that convey a sense of permanence. Quality materials should be used, regardless of architectural style.
- Apply changes in material purposefully and in a manner corresponding to variations in building mass.
- Avoid the use of highly reflective building materials and finishes that direct heat and glare onto nearby buildings.
- Climbing vegetation and green walls are encouraged as a method to provide articulation and visual interest to building facades.
- Use white or reflective paint on rooftops and light paving materials or “green roofs” to reflect heat away from buildings and reduce the need for mechanical cooling.

■ **WALLS AND FENCES**

- Long walls and fences should be broken up by landscaping, pilasters, offsets in the alignment of the wall or fence, and/or changes in material, color, or texture.
- Use decorative gates and fences in combination with landscaping to provide continuity at the street where openings occur due to driveways or other breaks in the sidewalk or building wall.
- Design fences and walls to provide protection and screening without the use of harsh or unwelcoming elements such as barbs or pickets.
- Materials such as chain link or barbed wire (cyclone) fences are strongly discouraged.
- On “heavy industrial” parcels, avoid uninterrupted walls and/or fences by providing a landscape buffer, which may be planted with shade trees, climbing vines, hedges, or similar living plant material.

- Screen outdoor storage with building materials consistent with the architectural character of the main building. Avoid materials such as sheet metal and barbed wire.

Active Pedestrian and Employee Amenities

■ SIDEWALKS

- For major industrial projects where a sidewalk does not currently exist, establish a new sidewalk along the length of the public street frontage.
- Create continuous and predominantly straight sidewalks and open space. Reconstruct abandoned driveways as sidewalks.
- Plant parkways separating the curb from the sidewalk with ground cover, low-growing vegetation, or permeable materials that accommodate both pedestrian movement and car doors. Brick work, pavers, gravel, and wood chips are examples of suitable permeable materials.
- Create a buffer zone between pedestrians, moving vehicles, and other transit modes by the use of landscaping and street furniture. Examples include street trees, benches, newspaper racks, pedestrian information kiosks, bicycle racks, bus shelters, and pedestrian lighting.
- Plant street trees to create a consistent rhythm, typically one tree for every 20 feet of street frontage. Broad-leaf evergreen and deciduous trees should be used to provide tree canopy. Shade producing street trees may be interspersed with an occasional non-shade tree.

■ CROSSWALKS/STREET CROSSINGS FOR LARGER-SCALE DEVELOPMENTS

- Incorporate features such as white markings, signage, and lighting so that pedestrian crossings are visible to moving vehicles during the day and at night.
- Improve visibility for pedestrians in crosswalks by eliminating on-street parking spaces adjacent to the crossing, and in non-heavy industrial areas, installing curb extensions/ bump outs and advance stop bars.
- Emphasize pedestrian safety and comfort at crosswalks with devices such as pedestrian crossing signals, visible and accessible push buttons for pedestrian actuated signals, and dual sidewalk ramps that are directed to each crosswalk.
- Create the shortest possible crossing distance at pedestrian crossings on wide streets. Devices that decrease the crossing distance may include a mid-street crossing island, an area of refuge between a right-turn lane and through lane, and in non-heavy industrial areas, a curb extension/bump out or a minimal curb radius.

Safe Access for Loading Areas While Buffering Pedestrians and Non-Industrial Uses

■ OFF-STREET PARKING AND ACCESS DRIVES

- Parking located between the road and the front of buildings should be limited to a small area reserved for visitor parking. Place on-site parking to the side or rear of buildings so that parking does not dominate the streetscape.
- Adjoining properties should share access driveways to minimize the number of driveways along public streets.
- Maintain continuity of the sidewalk by minimizing the number of curb cuts for driveways and utilizing alleys for access and egress. Where alleys do not exist, concentrate curb cuts at side streets or mid-block and ensure that they do not interfere with crosswalk locations.
- Where alternatives to surface parking are not feasible, locate parking lots at the interior of the block, rather than at corner locations. Reserve corner locations for buildings.
- When driveway placement on the primary frontage cannot be avoided, locate the driveway at the edge of the parcel rather than in the center.
- Minimize street-facing driveway width to 20 feet or less.
- Blend parking structure facades with nearby buildings by incorporating architectural treatments such as arches, attractive entrances, varied building materials, decorative screening, or climbing vines to provide visual interest.
- Illuminate all parking areas and pedestrian walkways to improve safety. Avoid unintended spillover impacts onto adjacent properties.
- Where the parking lot abuts a public sidewalk, provide a visual screen or landscaped buffer between the sidewalk and the parking lot.
- Mitigate the impact of parking visible to the street with the use of planting and landscaped walls tall enough to screen headlights.

■ LOADING

- Locate loading facilities to the rear of buildings. When loading facilities must be located at the front entrance, ensure that docks and doors do not dominate the frontage and are screened from the street.
- Ensure that loading areas do not interfere with on-site pedestrian and vehicular circulation by separating loading areas and larger commercial vehicles from areas that are used for public parking and public entrances.
- Dedicate no more than half of the site for vehicular purposes including parking areas, driveways, ramps, and loading areas.

Open Space and Pedestrian and Employee Amenities

■ ON-SITE LANDSCAPING

- Retain mature and healthy vegetation and trees when developing a site.
- Design landscaping to be architecturally integrated with the building and suitable to the functions of the space while selecting plant materials that complement the architectural style and form of the building.
- Design open areas to maintain a balance of landscaping and paved area.
- Select drought tolerant, native landscaping to limit irrigation needs and conserve water. Mediterranean and other local climate-friendly plants may be used alongside native species.
- Facilitate sustainable water use by using automated watering systems and drip irrigation to water landscaped areas.
- Facilitate stormwater capture, retention, and infiltration, and prevent runoff by using permeable or porous paving materials in lieu of concrete or asphalt. Collect, store, and reuse stormwater for landscape irrigation.
- In addition to street trees, provide canopy trees in planting areas for shade and energy efficiency, especially on south and southwest facing façades.
- Use predominately deciduous trees adjacent to west, south, and southwest facing exposures to cool these elevations.
- Use landscape features to screen any portion of a parking level or podium that is above grade. Trees, shrubbery, planter boxes, climbing plants, vines, green walls, or berms can be used to soften views from the public right-of-way.

■ OPEN SPACE AND PLAZAS IN INDUSTRIAL CAMPUSES

- Incorporate shaded open space, such as plazas, courtyards, pocket parks, and terraces, in new large-scale industrial developments. Design open areas to be easily accessible to employees and comfortable for a substantial part of the year.
- Orient open spaces to the sun and views. Create a sense of enclosure while maintaining safety, so that open spaces and plazas feel like outdoor rooms.
- Where employee amenities such as cafes or dining facilities are provided, ensure that they are oriented toward the street.
- Landscape all open areas not used for buildings, driveways, parking, recreational facilities or pedestrian amenities. Landscaping may include any practicable combination of shrubs, trees, ground cover, minimal lawns, planter boxes, flowers, or fountains that reduce dust and other pollutants.

Streetscape experience and visual clutter

■ BUILDING SIGNAGE

- Locate signs where architectural features or details suggest a location, size, or shape for the sign. Place signs so they do not dominate or obscure the architectural elements of the building design.
- Include signage at a height and of a size that is visible to pedestrians and facilitates access to the building entrance.
- Limit the total number of colors used in any one sign. Small accents of several colors make a sign unique and attractive, but competition of many different colors reduces readability.
- Select sign materials that are durable and compatible with the design of the façade on which they are placed.
- Limit text on signs to convey the business name or logo. Eliminate words that do not contribute to the basic message of the sign.
- Illuminate signs only to the minimum level required for nighttime readability.
- At large industrial developments, provide maps and signs in public spaces showing connections, destinations, and locations of public facilities and points of interest.

■ LIGHTING AND SECURITY

- Use ornamental lighting to highlight pedestrian paths and entrances while providing security by including after-hours lighting at building entrances.
- Install lighting fixtures to accent and complement architectural details. Shielded wall sconces and angled uplighting can be used at night to establish a façade pattern and animate a building's architectural features.
- Utilize adequate, uniform, and glare-free lighting, such as dark-sky compliant fixtures, to avoid uneven light distribution, harsh shadows, and light spillage onto adjacent properties.

■ UTILITIES

- Integrate solar powered lighting to increase energy efficiency.
- Place utilities out of the line-of-sight from crosswalks and sidewalks. Utilities such as power lines, transformers, and wireless facilities should be placed underground or on rooftops when appropriately screened by a parapet.
- Otherwise any mechanical or electrical equipment should be buffered with planting materials in a manner that contributes to the quality of the existing landscaping on the property and the public streetscape.
- Screen any mechanical, electrical, or communications equipment, whether on the roof, side of building, or ground. Solar panels should be integrated wherever practicable.
- Hide trash enclosures within parking garages so that they are not visible to passersby. Screen outdoor stand-alone trash enclosures using walls consistent with the architectural character of

the main building, and locate them so that they are out of the line-of-sight from crosswalks or sidewalks.

- Locate noise and odor-generating functions so as not to create a nuisance for nearby residents or adjacent neighbors.