

**C. Design Guidelines Specifications for Industrial Areas**

**1) Building Placement and Site Considerations**

**a) Physical Placement of New Buildings and their Relationship to the Street**

How a building presents itself—its distance from the street and sidewalk and its relationship to surrounding buildings—plays a significant role in determining whether a building will fit into the existing streetscape and become part of its overall character, or whether it will stick out as an obvious later addition which overlooked the surrounding neighborhood. While West Concord’s commercial areas have a very specific and straightforward layout, its industrial areas do not. Buildings in these areas have a less homogenous orientation - some sit directly on the roadway, while others are set farther back. In West Concord’s Industrial areas, the space is defined by the different groupings of the buildings and how they interact with one another. More flexibility can be given to the location of new construction in these areas so long as the existing, generally open setting and grouped building format is retained.

A property’s setbacks are the minimum distance from the front, side or rear property line which a building is required to be placed as defined under Dimensional Regulations in Concord’s Zoning Bylaw. New construction or additions must, at a minimum, meet the zoning requirements of the property. As noted above, however, property owner are also strongly encouraged to relate the placement of the building to its surroundings. In Industrial areas, or in cases where the developing lot(s) are adjacent to a building which has a significantly greater setback than other buildings on the street, the new buildings should be located in compatible relationships to the lesser setback structures.

West Concord’s industrial buildings were designed to be centered more on vehicular than pedestrian traffic. As the uses of these buildings change, it may be appropriate to consider alterations to existing buildings which orient the front or primary entrance to the street. This should also be considered in the design of new buildings in order to promote a pedestrian friendly environment. Buildings which present blank, featureless, or solid walls to the street have a closed off, inhospitable appearance which discourages pedestrian use of the area. Where the use of the building remains industrial, though, this goal may not be applicable. Further information on the orientation and development of specific building features can be found in Section 2, Architectural Elements.

**b) Zero Setbacks for New Structures**

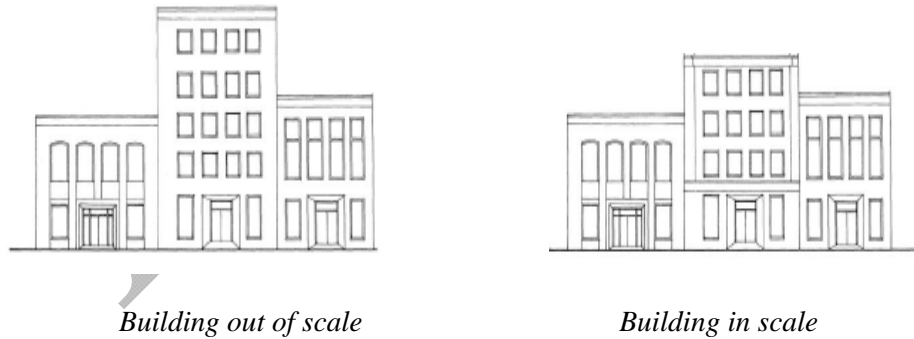
As noted above, West Concord’s Industrial areas have a more varied streetscape than its Commercial area and may require more consideration in choosing the location of a new building. A zero setback may be appropriate in some sections, but would be out of context with the surrounding buildings in others. Property owners should carefully

consider the buildings immediately adjacent to their proposed site and consider the guidelines outlined above before choosing the building's location.

**c) Scale of New Construction**

Buildings generally look out of character with their surroundings when their scale - the building's size relative to its surroundings and the components of the building - is dramatically out of line with that of adjacent structures. West Concord Village is hardly homogenous in its construction, but its predominantly one to two story structures are all of a human scale which is open and inviting to pedestrians. Where larger structures exist, they typically employ design elements, such as varying roof forms, to better relate to their surroundings. Industrial areas typically lack the unified scheme found in the streetscapes of commercial areas, but even here there is still a relationship between the relative height and size of adjacent buildings which ties the area together.

Scale is an important element of all new construction, whether in industrial or commercial areas. The larger scale of industrial buildings and the additional spacing between structures may allow for a greater variation in size and height between buildings in this area. However, whenever possible the overall height of a new building should be no higher than that of the nearest half-story of the adjacent building, or determined by the average height of the immediately surrounding structures on both sides. Large structures may take the approach of stepping in their side or rear elevations in order to gradually reach their desired height while still respecting the building in their immediate vicinity. Architectural elements are also used in the example shown below to help the new structure visually blend in with surrounding structures.



**d) Massing**

Where scale explains the relationship of buildings to one another, massing refers to the overall size and orientation of the building itself. As with scale, when the massing of a building is significantly different from that of surrounding structures, the overall effect can be jarring. West Concord's industrial buildings are not all similar scale, but the

individual groupings of buildings tend to have a similarity in overall massing. It is important to consider how a new building will fit in as a group with the surrounding structures in these areas, and to design new structures and additions which maintain similar proportions, roof forms, roof pitches and styles to that of their neighbors. New designs should be consistent with the form and massing of neighboring buildings and the directional emphasis of the established streetscape.



*Massing comparison between two adjacent buildings*

As noted in the Commercial area section, how the massing of a building is perceived can have a lot to do with its architectural details, how it relates to its surroundings and the size of the overall building. Industrial buildings by design lack many of the architectural trim and features which help to break down the mass of a building and have a tendency to feel larger even when their height and size is relatively consistent with similar buildings. This difference in perception is part of the character and style of these areas. New construction projects are encouraged to consider how the scale of the building can be broken down by the use of different building forms, or the stepping in or down of additional stories, rather than the use of decorative elements which may be out of character with surrounding structures.

**e) Eclecticism**

Much of West Concord's eclectic nature comes from the contrast between the established style and formal arrangement of the nineteenth century buildings lining its commercial main streets and the wide range of Vernacular forms and styles found in those buildings scattered along its industrial side roads. It is important when considering new construction or significant alterations to buildings in West Concord's Industrial area that this difference be noted and maintained. Further, it should be noted that no two buildings (with the exception of Bradford Street's three quintessential nineteenth century mill buildings) are exactly alike, and that adjacent buildings may be radically different in height, form, and exterior cladding. What unites these buildings, as noted above, is their form, use, and placement, and this fact presents property owners with an unusual amount of freedom when considering the exterior cladding and appearance of a new building in this area. These design guidelines are intended to

encourage this opportunity for new designs and architectural solutions, as well as to point out suggestions for how these new elements can be introduced to be in harmony with the existing landscape.

**f) Additions**

In Industrial areas, as with Commercial ones, the goal of a new addition should be the same - to create additional space or accommodations for modern conveniences while maintaining the original character and design of the existing building. An addition should be designed so that its size, placement, and design is in keeping with the character of the existing building, and does not radically change, obscure, damage, destroy, or render it subordinate to the new addition. In short, additions should be designed to work with, but not be identical to, the existing building.

Although the streetscape in West Concord's Industrial area is quite varied and many placement options are available, care must still be given to the location of any additions to ensure that the original building retains its character and prominence. Property owners may want to consider examples of later additions available in the area, such as the two which link the nineteenth century mill buildings on Bradford Street. Although relatively large (two and three stories) they do not overwhelm the existing structures, or even draw undue attention to themselves, because they are set well back from the street and are subordinate to the buildings which they connect. The existing streetscape and the scale and massing of the existing building should also be considered in the design of new additions.

In summary, additions should:

- be subservient to the original structure;
- be differentiated from the existing building (i.e., set back from the existing wall plane);
- be in harmony with the original structure in size, scale, style and materials; and,
- not obstruct the visual integrity of the original structure.

**g) Green and Sustainable Design**

Property owners are strongly encouraged to incorporate "green" design into both new construction and renovation projects whenever possible. Opportunities abound for integrating green elements into new structures including not only the more obvious choices such as good insulation, low-flow water fixtures, and fluorescent rather than incandescent lighting, but also the use of LED lighting for exterior sign and capturing rainwater for gardens or underground recharge systems. In fact, the nature of the existing buildings in West Concord's Industrial areas may allow for solutions which even showcase or highlight these green solutions in the building's overall design. In considering the surrounding landscape, bicycle racks and benches can be provided to encourage non-motor-vehicle transportation while managed parking agreements, already utilized by many of the Industrial area's businesses, can reduce the number of

parking spaces needed. Other options include solar panels, small roof-mounted turbines, purple-pipe wastewater systems, closed-loop geothermal heating systems, passive solar heating, natural lighting, and much more. Below are some suggested resources on green design:

- Concord's Green Team: ([www.greenteamconcord.org](http://www.greenteamconcord.org))
- U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Green Building Rating System ([www.usgbc.org](http://www.usgbc.org))
- International Dark-Sky Association ([www.darksky.org](http://www.darksky.org)): A non-profit member organization that teaches others how to preserve the night sky through factsheets, law references, pictures, and web resources.

## 2) **Architectural Elements**

In comparison with West Concord's Commercial construction, West Concord's Industrial architecture uses a very limited vocabulary of architectural elements to differentiate and add character to its buildings. The reason for this is the purpose behind the design of each building type - while Commercial construction is intended to draw attention and consumer interest, Industrial structures are focused on how best to accommodate the products, workers and machinery within the structure. With little or no need to draw the attention of the passing pedestrian, their exterior facades are generally far simpler in design. That is not to say, however, that architectural elements are any less important to an Industrial building than for any other found in West Concord. As with West Concord's Commercial buildings, these elements play a strong part in making West Concord's Industrial areas distinctive and in making the overall area memorable. Because the Industrial areas utilize far fewer architectural elements overall, it is particularly important to take existing ones into consideration both in designing new construction and when considering possible renovations to an existing building. Existing structures in the Industrial areas that are consistent with the Village's period of significance should be retained or restored. New alterations should be designed in such a way that they do not damage or hide original architectural elements, but when original elements have been removed or substantially altered, or where a building may have been designed without a street or pedestrian presence, contemporary treatments may be a suitable alternative. In these cases, however, the new treatments should not appear to be of poor quality, of a temporary nature, or ill-suited to the area (e.g., vinyl or aluminum siding).

When considering new architectural elements on an existing building, it is important that the new element complement the design, color, texture, and material of those elements already existing on the building. In addition, care should be taken to ensure that any new features are in scale with the structure itself. This is also true for new construction, where architectural elements can add character to the design of the new building and help to blend it into an existing streetscape so long as the elements chosen are in harmony with both the design of the new building and its surroundings.

The architectural elements defined below are drawn from West Concord's existing Industrial areas, and the recommendations made apply equally to new construction, reconstruction, significant renovations and all other forms of development which may be proposed within them. The features discussed below are some of the key elements which have contribute to this area's unique and diverse character, and any proposed new construction should consider and reference these architectural elements whenever possible. Copying existing buildings, though, is not the goal of these guidelines. On the contrary, part of West Concord's special character is its variety, and no where is that more true than in its Industrial areas. As the use of these buildings changes from industrial to more service oriented businesses, fresh ideas and new designs will be needed to incorporate the needs of contemporary customers into the existing landscape. Property owners are strongly encouraged to use creativity in the design, placement, and detailing of both new additions and new structures. In summary, it is the goal of these design guidelines not to preserve the Industrial areas "as is" but to encourage future change and development which both respects its existing structures and adds positively to the landscape.

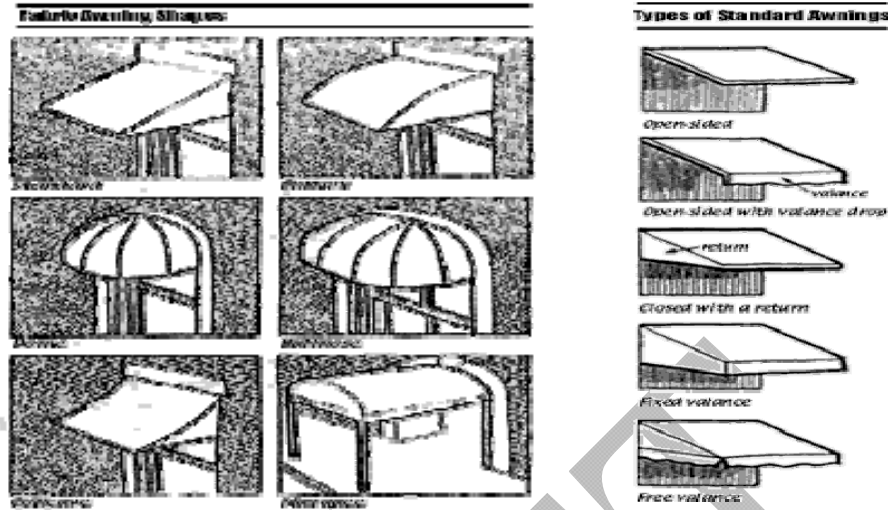
**a) Awnings**

Awnings are not a traditional element of West Concord's Industrial areas and are not currently found on any of its existing structures. However, awnings can provide an easy, cost effective way of establishing a pedestrian friendly front entrance on a building which might otherwise lack one. Not only do they focus attention, but they can also provide a location for signage and serve to protect customers from the weather.

For both Existing Structures and New Construction

Awnings should be chosen to be in harmony with the color schemes and styles of surrounding buildings, and care should be taken to avoid detracting from the form of the building or obscuring its details. Awnings on adjacent buildings should be consistent in character, scale, and location, but need not be identical to one another. Care should also be taken to ensure that awnings are attached to the building in a way that permits later removal without damaging the materials to which they are fastened.

Property owners are encouraged to use canvas awnings and to avoid the use of vinyl or plastic awnings. The shape of the awning should relate to the shape of the entrance or of the façade's architectural elements. While traditionally shaped awnings are generally encouraged for both new and existing buildings, creative or unusually-shaped awnings which have been carefully designed to work with the building and streetscape may also be an option. Common awning styles include the following:



## b) Doors and Entrances

### Existing Buildings

West Concord's Industrial areas do not have one typical or common entrance or door type. Each building was constructed with an entrance that met the needs of its specific location or function, and so for many of these buildings, a loading dock or service door will be the most prominent entrance available. As building have been renovated or subdivided, pedestrian entrances have become more common and more prominently located. For this reason, renovations of existing entrances may not always be encouraged. New or renovated entrances should be designed to be in keeping with the style of the given building and to meet the needs of the businesses within. New pedestrian entrances should be located on the street or most prominent façade of the building, with attention given to how the entrance design and materials can attract potential customers to the establishment.

Property owners should note that by federal law, new store entrances must also be accessible to the physically disabled. As the main level of many of West Concord's Industrial buildings were built high off the ground to accommodate transportation and manufacturing needs, this may present a challenge in developing new accessible entrances. Each building will have its own unique challenges to providing this access, so it is important for property owners to carefully consider possible options before making permanent changes to original building features. Planning Division staff is available to assist in reviewing potential options.

### New Construction

While West Concord's Industrial buildings have not traditionally included significant front entrances, it is understood that any new construction in these areas will most likely provide space for retail establishments which will draw on local pedestrian

traffic. For this reason, any new construction is strongly encouraged to develop its street presence by including a centrally located and prominent primary entrance. As with commercial structures, these entrances should be clearly marked and designed to provide a sense of welcome and easy passage from exterior to interior. Recessed doorways may be one potential solution for providing cover for pedestrians and customers in bad weather, can provide a clear area for out-swinging doors and offer the opportunity for interesting paving patterns, signage, and displays. However, recessed entrances are not common in the Industrial areas of West Concord, and a more creative solution may be possible as part of the design of the new structure.

When a side entrance is necessary, it should be located as close to the street front as possible. Loading and service entrances should be located on the side or rear of buildings and should be screened from public ways and adjacent properties to the greatest extent possible.

### **c) Exterior Materials/Siding**

#### Existing Buildings

West Concord's existing Industrial areas utilize a wide variety of exterior cladding materials and it is difficult to pick any one material which dominates over the rest. The majority of the earliest industrial buildings in the area are still wood clapboard sided, while later structures are more typically cement block or have metal siding. However, there are also examples of brick, wood shingle, stucco and vinyl siding interspersed in this area. As a general rule, property owners are encouraged to use and maintain whatever material is original to their building as this material is both essential to the architectural character of the building and plays a strong role in the visual appeal of West Concord's Industrial areas. Further, property owners of existing structures should maintain the original exterior material of their building (brick, stucco, wood, etc.) in a manner which is consistent with its historic appearance - i.e., wood shingles or clapboard should be maintained as a painted surface, while property owners should avoid painting surfaces which were never designed to be painted, such as masonry or brick.

When repair or replacement of exterior materials is necessary, property owners should use the same type of exterior cladding and, whenever possible, consider the use of natural materials. Property owners are strongly discouraged from replacing wood shingles or clapboard siding with aluminum or vinyl siding as the change in material does not adequately replicate the appearance of the original materials and requires the loss of original architectural details and character defining features which make the building unique. Further, these materials will age and weather differently than natural materials, giving the building a worn or faded appearance which can quickly appear shabby or "cheap" and will detract from the streetscape. Vinyl, aluminum, or other synthetic sidings may be cheaper up front, but the loss of detail

and the obvious change in quality of the building can have negative impacts in the long run as pedestrians and shoppers are more likely to be drawn to establishments which have well maintained and attractive appearances.

Today there are many new materials on the market which purport to mimic the appearance of natural materials without the expense of regular maintenance such as Azek or Hardiplank. These and other composite materials may prove to be reliable alternatives to the original building materials and West Concord's Industrial structures could be good candidates for many of these products. Property owners are encouraged, though, to carefully research these products to ensure that they can adequately replicate the exterior appearance of their building before making any change in an original exterior material or architectural element.

### New Construction

These same recommendations are also applicable to new construction. Natural materials are important to West Concord's existing character, and their use in new construction can help to tie those designs into the overall streetscape. As there are already a wide variety of material in use in West Concord's Industrial areas, property owners should consider the materials used in the buildings immediately surrounding the potential development, and take these elements into consideration when developing the overall plan and design of any new structures. And as noted above, the Industrial areas may also provide excellent opportunities for new or more energy efficient materials to be utilized.

#### **d) Fire Escapes - Existing Buildings Only**

Fire escapes are conspicuous additions to an existing building which can detract from its style and architectural character. However, a second means of egress is a current building code requirement which can be difficult to meet within the interior of an older building, and in certain circumstances a fire escape may be necessary. Some industrial structures may be able to accommodate these features as part of the design of their exterior facades, but as a general rule, every effort should be made to locate this access on the interior of the building. When this is not possible, fire escapes should be located on the rear or side façades of a building, or in an area with as little public visibility as possible.

#### **e) Gutters, Downspouts and Drainage**

### Existing Buildings

Gutters and downspouts are important mechanisms for diverting water away from a structure, without which water would splash off the roof onto exterior walls, soaking potential customers and potentially leading to future structural problems. At a minimum, gutters and downspouts should be large enough to handle the discharge and installed at a sufficient pitch to carry the water off quickly. Drainage should be

dealt with in such a way that it is contained on site where possible and does not flow into the public sidewalk, street or path.

In addition to their mechanical importance, gutters and downspouts can be integral to the design of a building's architectural trim (cornice details) or roof. When this is the case, care and consideration should be taken before making a change in their material or design. Where original gutters are missing or the original design unclear, then an effort should be made to match the style of the existing building and/or to make the new gutters as unobtrusive as possible.

#### New Construction

New Construction projects should take into consideration all of the points noted above when deciding how best to deal with water and drainage issues on site. However, far more flexibility is available in the design, materials and methods used to accommodate water and drainage issues in new buildings, and property owners should consider creative ways to address these issues which are either invisible to the streetscape or add to its character and design of the building. In particular, property owners are strongly encouraged to consider green solutions such as those noted in Section 1 (f) *Green and Sustainable Design*.

#### **f) Modern Equipment**

##### Existing Buildings

Modern equipment encompasses utility and other mechanical equipment such as antennas, cellular towers, satellite dishes, propane and other tanks, dumpsters, utility meters, alarm systems, HVAC equipment (including air conditioners and condensers, heating units, ducts, fans, and solar collectors or panels) and associated mounting devices, strapping, fasteners, cables and related equipment. By their very nature, West Concord's Industrial areas are more likely to include buildings which were originally designed and built to include these features or their early predecessors. In these cases, future upgrades or changes in equipment can simply be located in the same place as any existing equipment and should, wherever possible, take advantage of existing openings in the building or enclosures on the site. Unused or outdated equipment should be immediately removed to avoid clutter. Property owners are also encouraged to take advantage of the wide spacing and scattered building layouts of Beharrell Street to find convenient areas for ground based equipment (dumpsters, tanks, etc.) which are invisible or inconspicuous from the public ways and sidewalks. Bradford Street's more regular streetscape offers fewer such possibilities, but there are still numerous opportunities to set objects well back from the street on the deep lots in this area.

For those buildings not designed with these needs in mind, care should be taken to insure that any additions of modern equipment are as inconspicuous as possible. This will be true primarily for the area's late nineteenth century mill building construction,

but here too the design of these buildings will offer far more flexibility in locating this equipment than in buildings in the Commercial areas. The shallow sloped or flat roofs which predominate in this area are well suited for locating solar panels, vents, flues, antennas, satellite dishes and A/C equipment in such a way that they have limited or no visibility from the street. The interior spaces of these structures are generally open and easily adaptable, and every effort should be made to avoid running electrical wires and other cables on the exterior of the building. Because of the importance of these buildings to the character of the area, installations on the front façade of a building is strongly discouraged. Seasonal air conditioning units should be located on the side or rear façades, and visible vents should be painted to blend in with the building as much as possible.

### New Construction

New construction should take advantage of the flexibility of space and siting in the Industrial areas to cleverly incorporate modern equipment into the design of new buildings while meeting the goals outlined above. In some cases, this equipment may be well screened from view, while others may find creative ways to make them visible elements of the design. Industrial areas ideally provide greater flexibility in addressing these problems but the ultimate goal is still to create a pleasant and attractive street environment for customers and residents.

### **g) Paint Color**

#### Existing Buildings

Exterior facades in West Concord's Industrial areas use a wide range of building materials, many of which are not designed to be painted. Those structures which are painted can be divided into two categories - the late nineteenth century wood clapboard structures and the twentieth century cement block ones. Both categories generally use a very muted color palette (tans, whites, or grays) for the body of the building, with the wood clapboard structures being more likely to branch out into other colors. Cement block buildings generally have little or no trim to differentiate with color, and the wood clapboard structures are very restrained examples in comparison to their Commercial area neighbors. In general, the trim on these buildings is painted in a similar, or slightly lighter, color than the main body of the structure.

As noted previously, Industrial buildings were not typically designed to draw attention to their exterior facades and so the muted color schemes noted above were appropriate to their original use and needs. However, as the uses within these structures change to more retail and service oriented businesses, a shift in the color scheme may be appropriate. Property owners may want to consider updating their structures in a manner consistent with the Paint Color guidelines for Commercial Structures. This would involve using more distinctive color patterns, differentiating between the color of the trim and the body of the building, and using paint color to

highlight unique aspects of the building. Property owners would still need to consider the surrounding structures, however, to make sure that the new scheme was in harmony with the overall area.

Lastly, it should be noted that these suggestions for existing buildings apply only to exterior surfaces which are already painted. Exterior materials which were never designed to be painted (vinyl siding, metal sheathing, brick) should remain in their original condition.

#### New Construction

It is understood that any new construction within the Industrial areas will most likely be contemporary in design and may utilize materials which do not require painting. That is not to say, however, that the use of distinctive colors cannot be part of the design of a new building or that this consideration should not be part of the planning process. Property owners should consider the design of their new building as well as those of neighboring structures when considering how best to address this issue. Where painting is appropriate, colors should be chosen to add interest and variety to the area while still remaining in harmony with surrounding structures.