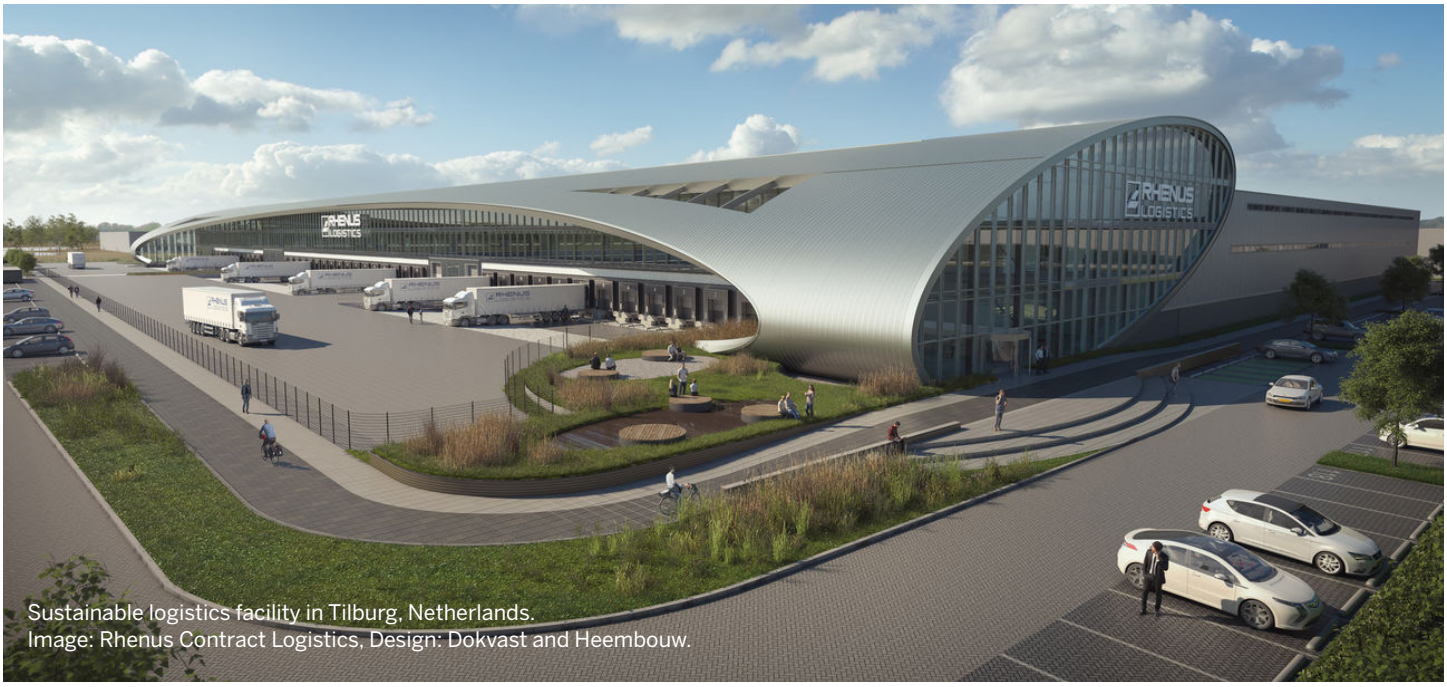
Industrial Design Guidelines

City of Detroit

APRIL 2022

INTRODUCTION



Sustainable logistics facility in Tilburg, Netherlands.
Image: Rhenus Contract Logistics, Design: Dokvast and Heembouw.

Vision and Purpose

The following design guidelines illustrate options, solutions, and techniques to **encourage industrial development that is: appropriate for its urban context, sensitive to adjacent uses, and high-quality in site and building design.** The guidelines are based on urban design and environmental best practices, as well as feedback from Detroit residents who have been most impacted by industrial development. The guidelines are designed to:

1. **Increase predictability for developers.** The guidelines clearly illustrate the City's expectations for design excellence and explain how PDD will evaluate projects. The inclusion of new standards that require greater sensitivity to residential areas will also help developers anticipate and address issues that can become sticking points during public outreach and hearings.
2. **Address long-standing concerns.** The design guidelines include new standards that address issues we have repeatedly heard raised by residents, including truck traffic, buffering, and sustainable design.
3. **Encourage design flexibility.** The guidelines are recommendations, not requirements. As such, PDD can work with developers to ensure projects adhere to the overall vision and guiding principles for industrial development in a variety of different ways.

These guidelines complement, but do not supersede, regulations in the City of Detroit Zoning Ordinance. Should a conflict exist between the two, the Zoning Ordinance shall govern. This does not exempt the applicant from meeting the standards of this document should a lesser standard be required in the Zoning Ordinance.

Applicability

The design guidelines apply to any industrial project requiring PDD Design Review (also referred to as Concept Plan Review, see Sec. 50-3-201). The most common triggers for industrial projects are public land sales or public incentives, as well as any project that triggers a Community Outreach Ordinance (COO) or Community Benefits Ordinance (CBO) process.

How to Use this Document

This document contains guiding principles and design guidelines. The guiding principles are adapted from those that the Planning and Development Department (PDD) currently uses to review developments to be more appropriate for large industrial projects. Applicants will receive feedback from PDD based on the project's compliance with the guiding principles.

The design guidelines provide greater detail and clarity about how PDD will evaluate projects for compliance with the guiding principles.

Review Process

Design Review is part of the City's normal entitlements process, and is particularly important for industrial projects that require City Council approval. Design Review typically occurs early in the process, prior to any public outreach or hearings.

The PDD Design Review Team will review each project and provide comments on the project's conformance with the guiding principles. PDD may waive or modify certain standards depending on the project, but generally these design guidelines should be followed. Failure to meet the guidelines may require revisions, lengthening the time it takes to receive PDD approval. Depending on the project, revisions may be submitted and reviewed in parallel with subsequent steps, such as site plan review.

PDD staff are available at any time to review the design requirements with you and answer any questions you may have. If you are working with the Detroit Economic Growth Corporation (DEGC) on your project, ask your project manager for a kick-off meeting to set up an initial review.

GUIDING PRINCIPLES

All industrial development subject to the Industrial Design Guidelines must comply with the following guiding principles. The Planning and Development Department will provide feedback on the project's compliance with these principles, not the individual design guidelines in the next section.

1 Appropriate Site Design

New development should be appropriate for its context, with building height, setbacks, orientation, lighting, and signage all designed to fit with the surrounding area.

2 Site Access & Circulation

Provide adequate access and maneuverability for trucks and cars while paying special attention to the attractiveness of the street frontage and conflicts with residential streets and pedestrian paths.

3 Parking, Loading, & Outdoor Storage

Screen and locate parking, loading, and outdoor storage areas toward the side or rear of the property away from public streets and homes.

4 Buffering

Ideally, industrial uses are located away from residential areas, though this is not possible in many places within the City. To mitigate negative impacts from industrial uses, sites should provide natural buffers, especially for high-impact industrial uses, adjacent to rights-of-way and vulnerable uses.

5 Building Form & Materials

Buildings should be designed to avoid the appearance of long, blank walls and use high-quality building materials to enhance key elements such as entrances and corners.

6 Walls & Fences

Walls and fences are attractive, durable, and used to provide screening or security in certain areas of the site, rather than "wall off" the entire facility.

7 Site Landscaping

Use interior site landscaping to offset expanses of impervious surfaces and soften visual impacts of large buildings, truck parking/loading, outdoor storage, and detention ponds.

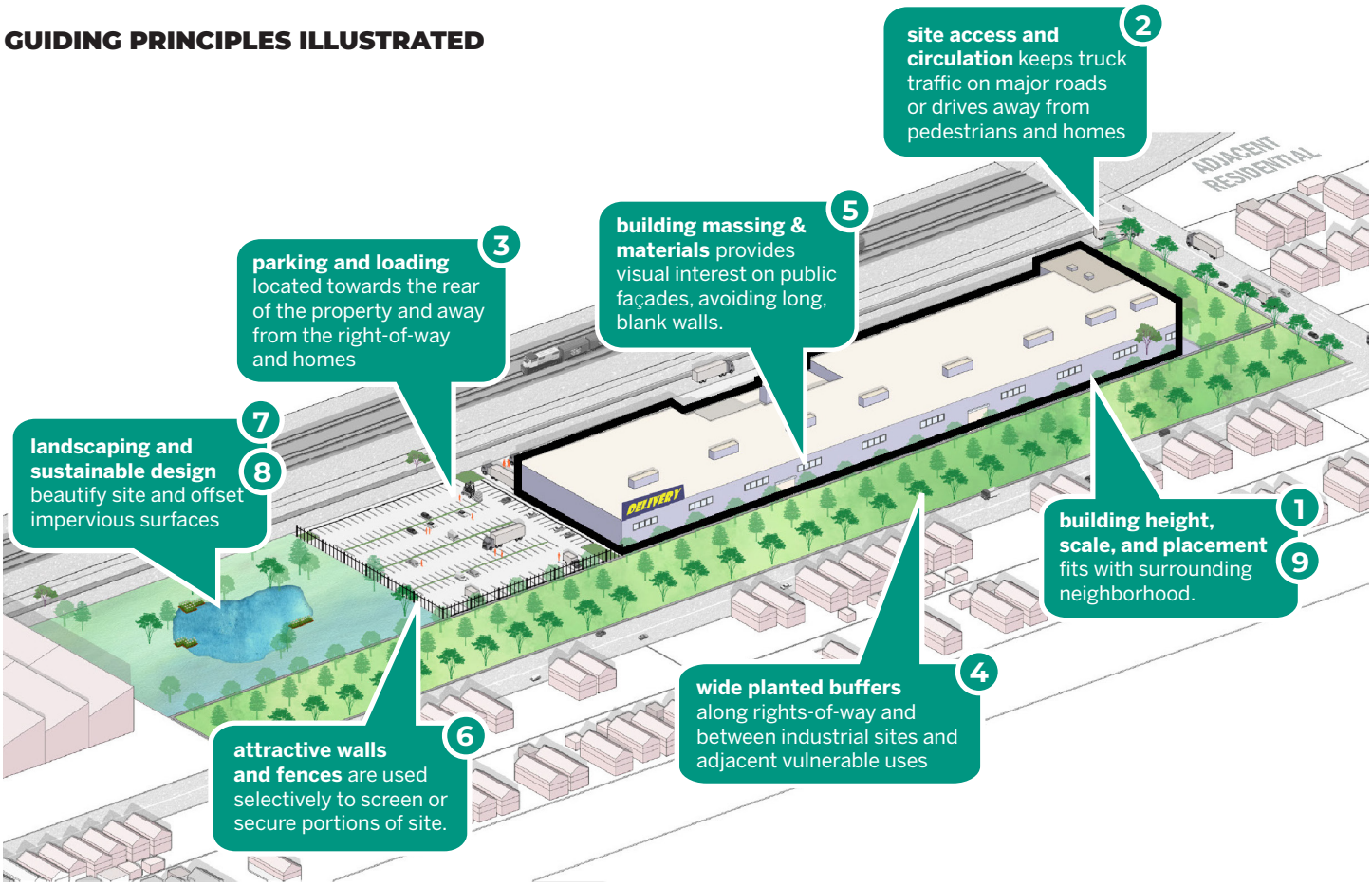
8 Sustainable Design

Site and building design should utilize design strategies that decrease energy use, reduce urban heat island effects, manage stormwater runoff, and naturally mitigate air pollution resulting from industrial operations and traffic.

9 Historic Structures & Neighborhoods

Realizing that rehabilitating existing industrial buildings for new users is often difficult and costly, the intent of this principle is to preserve historic structures to the greatest extent possible. Where industrial sites are adjacent to residential areas, design sites and buildings to be harmonious with neighborhood development patterns.

GUIDING PRINCIPLES ILLUSTRATED



DESIGN GUIDELINES

The design guidelines expand on the guiding principles to provide greater detail about how the Planning and Development Department will evaluate industrial projects for conformance with each of the guiding principles.

1. Site Design

A. For larger developments, cluster buildings to allow for shared circulation and parking, easy access to common outdoor spaces, and to promote pedestrian safety.

B. Building density should fit within the surrounding area and consider transitions between industrial and non-industrial users. Where appropriate, this may mean increasing the density of industrial development to avoid unnecessary sprawl of large, single-story buildings.

C. Create a strong street wall by locating buildings at the front property line or at the minimum required setback (buffer). Where an additional setback is necessary, activate the area with an "outdoor room" adjacent to the street, incorporating landscaping, outdoor seating, water features, or public art.

D. Provide clear building and site signage. All signage (including wayfinding, directory, and wall signs) should have a unified design theme.

E. Illuminate all parking areas, entrances, and pedestrian walkways to improve safety. However, the site should not be over-lit to avoid spillover impacts onto adjacent properties. Light sources should be integrated within the buildings or shielded to reflect down onto the ground.

2. Site Access & Circulation

A. Locate primary site access on/off of designated truck routes, highways, or major arterials, not residential streets. Do not route trucks past homes.

B. Share access driveways between adjacent properties to minimize the number of curb cuts. Concentrate curb cuts at side streets or mid-block and ensure that they do not interfere with sidewalks and crosswalks.

C. Maintain the existing street grid—including use of alleys for site ingress and egress—to the greatest extent possible to avoid the creation of new superblocks.

D. Developments should provide connections to the City's transit and sidewalk network to make it easy to walk, bike, or take transit to the site.

E. Provide direct paths of travel for pedestrian destinations within development site and to adjacent sites.

F. For large-scale projects where a sidewalk does not currently exist, establish a new 6-foot (min.) sidewalk along the length of the public street frontage to accommodate pedestrian activity.

G. Promote pedestrian activity by placing entrances at or slightly above grade and making them clearly visible from the public right-of-way (ROW).

H. Provide and disperse bicycle and/or scooter parking throughout larger sites in convenient and visible areas close to building entrances.

EXAMPLE: SITE DESIGN, ACCESS & CIRCULATION

1. Buildings oriented toward primary street; create a street wall
2. Buildings appropriate in scale to adjacent uses, block sizes, etc.
3. Parking to the side or rear of the building
4. Truck parking, loading, and access to rear of building away from homes
5. Site access from major roads; maintaining existing street network and avoiding truck traffic on residential streets
6. Sidewalks provided along street that connect to building entrances, separate from parking/loading areas

3. Parking, Loading, & Outdoor Storage

A. Place on-site parking, loading, and outdoor storage areas to the side or rear of buildings. Do not locate truck parking or loading docks facing residential areas.

B. Reserve corner locations for buildings, not parking, loading, or outdoor storage.

C. Side-yard parking, loading, or storage should not extend beyond the front of the building(s).

D. All truck parking, loading docks, and outdoor storage must be fully screened from rights-of-way or residential areas. See **Sec. 4. Buffers on pg. 8** for specific screening requirements.

E. Separate loading areas and larger commercial vehicle traffic from areas that are used for public parking and public entrances.

F. Outdoor storage, truck parking, and truck maneuvering areas should be paved or employ mitigation techniques to prevent dust or other airborne particles from leaving the site. Appropriate mitigation techniques include, but are not limited to: crushed limestone, asphalt millings, or pseudo pervious ground surfaces; watering; sweeping; truck washing stations; and/or approved chemicals or oils to tamp down dust.

4. Buffers

See example buffer diagrams on pg. 9 for illustrative examples of the following guidelines.

A. A minimum 15-foot natural buffer should be provided along rights-of-ways. For some low- or medium-impact uses, the ROW buffering width may be reduced to better fit with the surrounding area.

B. A minimum 30-foot natural buffer should be provided where an industrial use is adjacent to a vulnerable use (homes, parks, and institutional uses like churches, schools, and day cares). This buffer applies even if the industrial site is separated from a vulnerable use by a street or alley.

C. Natural buffers shall consist of landscaping, which may be combined with walls or berms.

D. Natural buffer landscaping should include a mix of broadleaf evergreen and deciduous trees, shrubs, and groundcover to maintain a year-round tree canopy and screening. Mixing of small, medium, and large trees and shrubs is preferred. Recommended species include but are not limited to:

- **Shrubs:** Dogwood varieties, Chokeberry, Blackberry highbush, Ninebark, Spicebush, Sumac varieties, Yew, Michigan Holly, Spirea, Witchhazel, Viburnum.
- **Small to Medium Deciduous Trees:** Crabapple varieties, European Hornbeam, Eastern Redbud, Hackberry, Horse Chestnut, American Yellowwood.
- **Large Deciduous Trees:** Linden varieties, London Planetree, Maple varieties, Oak varieties.
- **Evergreens (various sizes):** Arborvitae, Fir, Juniper, Pine, or Spruce varieties.
- **Prohibited Species:** See the City's list in Sec. 50-14-324 of the Zoning Ordinance.

E. Truck and semi-trailer parking, loading docks, outdoor storage, outdoor work areas, and service yards must be screened from view from the ROW or adjacent vulnerable uses to the fullest extent practical.

- Where a solid wall or berm is not provided, landscaping must be planted densely enough to provide adequate screening. Staggered or double row plantings are recommended to achieve a fuller screen.

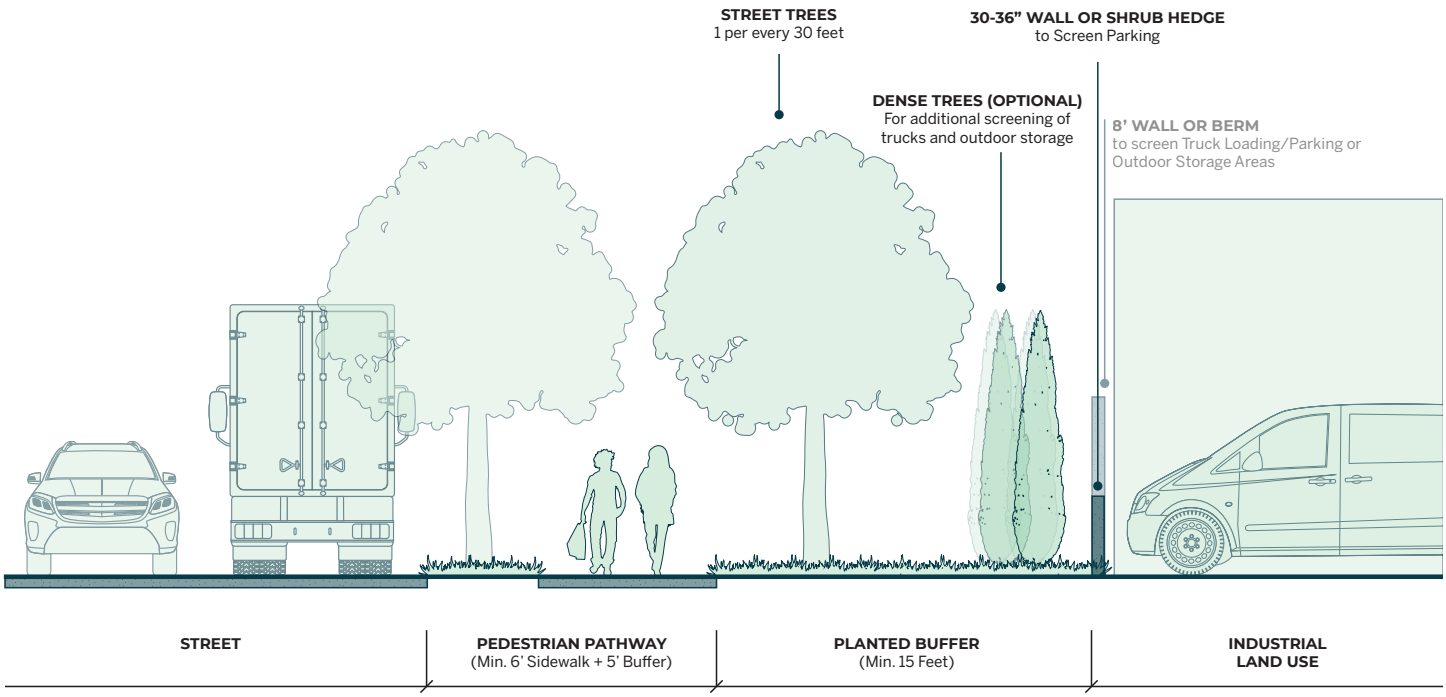
F. Off-street car parking shall be screened as required by Sec. 50-14-341 and 342 of the Zoning Ordinance.

G. Recommended spacing for landscaping in natural buffer areas to acheive the desired screening and/or filtering effects is as follows:

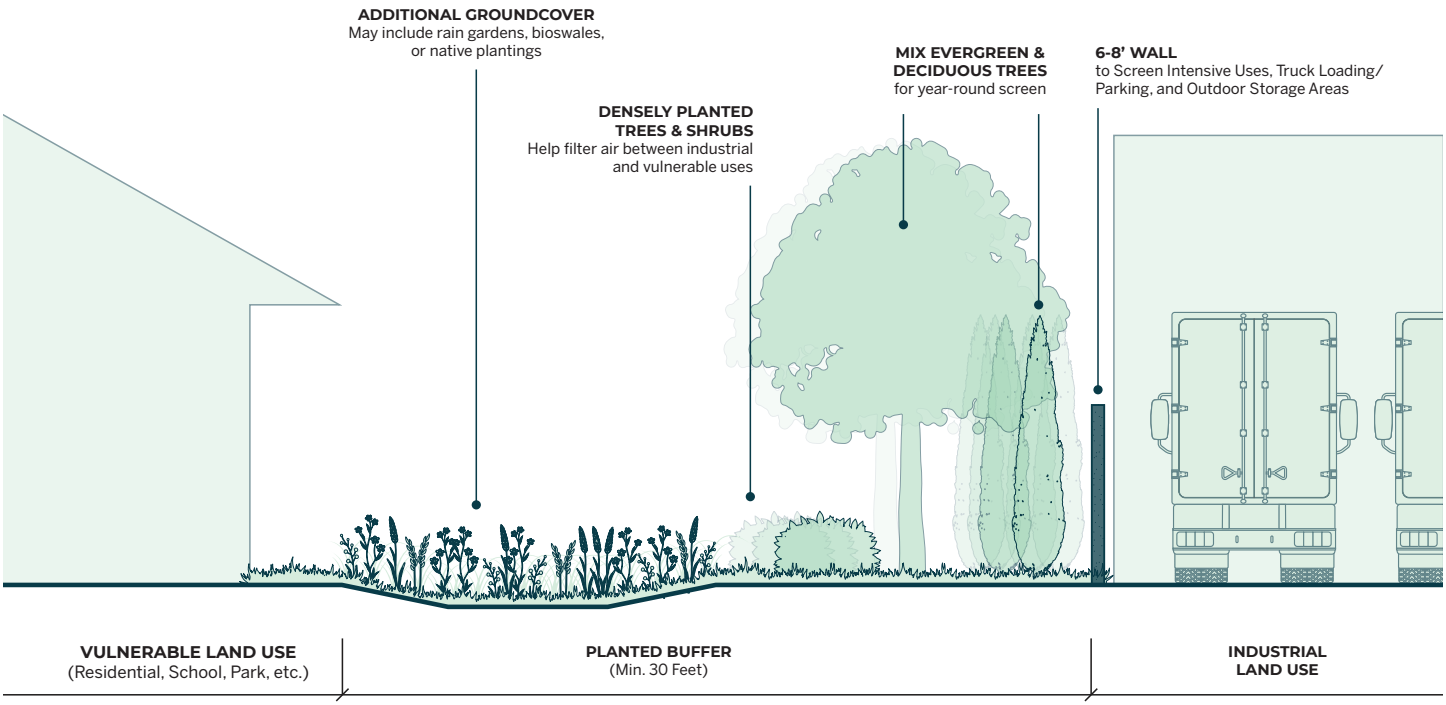
- **Small to Medium Trees:** 1 per every 15 feet.
- **Large Trees:** 1 per every 30 feet.
- **Shrubs (hedge):** Varies; installed so that a dense and continuous screen is formed.

H. Integration of green infrastructure for stormwater management, such as bioswales or rain gardens, into buffer areas is strongly encouraged.

EXAMPLE: ROW BUFFER



EXAMPLE: VULNERABLE USE BUFFER



5. Building Form & Materials

A. New buildings should be compatible in scale, massing, and style with structures in the area.

B. Vary and articulate façades to avoid large monotonous walls. Where the building mass cannot be broken up, building walls may be articulated through the use of texture, color, material changes, or other façade treatments.

C. Treat public (front) façade(s) with architectural rigor and high level of detail. Entries, corners, offices, and/or showrooms should be emphasized through building massing and material accents including metal, woodwork, and clear, non-tinted windows. Ideally, all façades have a high level of detail.

D. Architectural elements should be compatible in scale with the building massing and should not be made to appear as a caricature of an historic architectural style.

E. Use quality building materials that convey a sense of permanence.

F. Avoid the use of highly reflective building materials and finishes that direct heat and glare onto nearby buildings.

G. High-intensity colors may be used as accent colors.

H. Approach stylistic details in a manner that is true to a style of architecture or common theme.

I. All mechanical equipment should be appropriately screened from view. Large vent stacks and similar features should be avoided.

J. Exterior support equipment should have a functional placement and be located where it can best integrate with the building's architecture. Architecturally integrate exposed industrial systems and equipment as a design option where practical.

K. Utility facilities should be placed underground wherever possible.

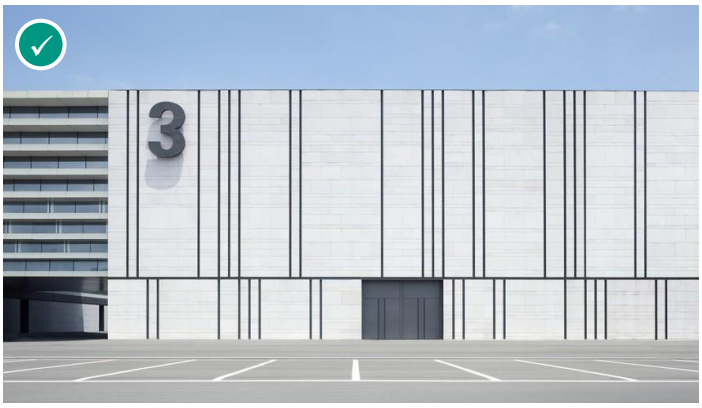
EXAMPLES: BUILDING FORM & MATERIALS

X Not permitted/Discouraged ✓ Permitted/Encouraged

Large, blank wall with no massing, material, or color breaks.

Building massing and materials articulate entrances and corners.

Variation in façade colors used to break up large facade.



Variation in building materials/material patterns break up large façades.

6. Walls and Fences

A. Break up long walls and fences with landscaping, pilasters, offsets in the alignment of the wall or fence, and/or changes in material, color, or texture.

B. Tall solid walls are discouraged along the public right-of-way; decorative or transparent fencing is preferred, enhanced with landscaping for screening purposes.

C. Fences or walls should use materials and colors consistent with the architectural character of the main building.

D. Durable, natural materials are preferred for fences and walls that are visible from the public street or adjacent non-residental lots, including: aluminum, steel, iron, pre-cast concrete, stone, or brick.

E. Prohibited fencing materials can be found in Sec. 50-14-368 and 381 of the Zoning Ordinance.

✗ Not permitted/Discouraged ✓ Permitted/Encouraged

EXAMPLES: WALLS & FENCES


Tall, solid fencing along the ROW with sparse landscaping.


Walls and/or fences combined with landscaping.


Decorative aluminum or steel fencing.


Louvered, die-cut, or patterned metal fencing.


Smooth or stamped pre-case concrete masonry for screening.


Combination of brick and metal for solid screening wall.

7. Site Landscaping

A. Design interior site landscaping to be compatible with and architecturally integrated with the building and suitable to the functions of the space.

B. Retain mature and healthy vegetation and trees when developing sites, especially native species, to the greatest extent possible.

C. Provide canopy trees in planting areas for shade and energy efficiency, especially on south and southwest facing façades and parking lots.

D. Site landscaping may include gentle mounded areas with a maximum slope of three to one and a preferred slope of four to one. Slopes of mounds and berms shall blend into the adjacent terrain, unless stabilized by a retaining wall or curbing.

E. Install an approved irrigation system for all landscaped and turf areas.

8. Sustainable Design

A. Utilize sustainable building, site design, energy, and stormwater strategies to offset impacts of large industrial sites. Those strategies may include, but are not limited to:

- Orienting buildings to take advantage of passive heating, cooling, and daylighting opportunities.
- Using white or reflective paint on rooftops, light paving materials, and/or green roofs to reduce heat island impacts of impervious surfaces.
- Integrating solar panels (roof or ground mounted) to offset on-site energy needs.
- Employing stormwater management solutions that do not occupy vast expanses of land—such as green roofs, permeable pavement, underground retention, and bioswales incorporated into parking lots or buffers—to the greatest extent possible.
- Collecting, storing, and reusing stormwater for landscape irrigation.

✗ Not permitted/Discouraged ✓ Permitted/Encouraged

EXAMPLES: SITE LANDSCAPING

No interior landscaping.

Interior landscaping breaks up impervious surfaces and enhances site.

EXAMPLES: SUSTAINABLE DESIGN

Landscaped retention basins and bioswales

Green roof

9. Historic Properties & Neighborhoods

A. Industrial sites are encouraged to preserve existing structures or neighborhood development patterns (e.g., building setbacks, height, materials) to the greatest extent possible.

B. Where historic structures are preserved, the following guidelines should apply (**note: locally or nationally designated historic assets have different standards and review processes**).

- Preserve, repair, and replace, as appropriate, building elements and features that are important in defining historic character. Original building materials and features should not be removed, covered, or painted.
- Repair deteriorated materials or features in place, if feasible. When it is infeasible to retain materials or features, replacements should be made with in-kind materials or with substitute materials that convey the same form, design, and overall visual appearance as the original.
- Design building additions to be compatible with the massing, size, scale, and architectural features of an historic structure or site, while clearly reflecting the modern origin of the addition.

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