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ARTICLE 7: INSTITUTIONAL, MIXED-USE, COMMERCIAL, AND LIGHT INDUSTRIAL BUILDING AND SITE DESIGN STANDARDS

17.7.1: General

17.7.1.1: Purpose and Intent

This Article establishes site and building design standards for development in the City of Lakewood. The purpose of these design standards is to ensure that development implements the principles and goals articulated in the Comprehensive Plan for quality and sustainable development that interacts and functions well with the surrounding community. The purpose of the design standards in this Article is to:

- A. Provide high quality design in new development and redevelopment that promotes a sense of community identity.
- B. Provide a well-designed site circulation system with a strongly defined pedestrian and vehicular network, good connections to adjacent land uses and efficient connections to transit stops.
- C. Provide an overall landscape treatment of exterior spaces which enhances the quality of the project, creates usable open space, establishes an urban tree canopy, and creates transitions between land uses.
- D. Provide sustainable development through the adaptive reuse of existing buildings, the design of energy efficient buildings, the use of renewable and low-energy use materials and the installation of water wise landscaping.

The manner in which a particular land use functions and interacts with adjacent and surrounding land uses is integral in creating a successful development. The design of a new development or redevelopment should embrace the intent of the particular zone district and the purpose of the design standards in this Article.

17.7.1.2: Applicability

This Article establishes building and site design standards for all buildings and sites with uses other than residential development in the City. The design standards shall be applied to any addition or new construction except where explicitly superseded by an approved Official Development Plan or as identified in this Article.

17.7.1.3: Design and Development Manuals

In addition to the design standards established in this Article, the City has adopted design and development manuals to further articulate the intended design for specific areas of the City. Any new development or redevelopment of a site located in an area governed by a design manual shall adhere to the standards outlined in such manuals.

17.7.2: Building Design Standards

17.7.2.1: Architecture

The following design standards are intended to provide for the architectural interest of buildings throughout the City:

- A. The first floor façade of all buildings, including structured parking facilities, shall be designed to encourage and complement pedestrian-scale interest and activity through the use of elements such as windows, awnings, and other similar features.
- B. Architectural features and treatments shall not be limited to a single façade. All visible sides of a building, whether viewed from public or private property, shall display a similar level of quality and architectural interest, with elements such as windows, awnings, a variety of exterior materials, reveals, and other similar features.
- C. All buildings shall be designed to have at least two of the following (See Figure 17.7.1):
 - 1. Visual breaks in the façade such as horizontal articulation in the plane of the façade by at least 2 feet; or
 - 2. Change in height of the façade by at least 2 feet; or
 - 3. Change in materials, color, texture or pattern; or
 - 4. Columns or pilasters with a minimum 4-inch horizontal depth from the plane of the façade and spaced at a maximum interval of 50 feet.



Figure 17.7.1: Façade Design

17.7.2.2: Materials and Colors

- A. A variety of materials and colors shall be used on each building to avoid uniform façades. Contrast on a building may be accomplished by providing the appearance of various depths to the façade, overhangs, shadow lines on a façade of a building, or a variety of materials and texture.
- B. Color shades shall be used to unify a building or development where there is more than one tenant. Color combinations shall be complementary to the building and overall site development.

17.7.2.3: Exterior Building Elements

The following design standards are intended to minimize the impact of mechanical and service elements of buildings:

- A. Utility meters shall be screened from view from a public street to the greatest extent possible and shall be painted a color to blend with the building façade.
- B. All exterior rooftop mechanical equipment shall be setback a distance at least equal to their height above the roof, or be screened from public right-of-way through the use of parapets or enclosures that are equal to, or greater than, the height of the equipment to be screened. The parapet or enclosure shall use one of the predominant materials or colors used on the primary façade of the building.
- C. On all structures exceeding 35 feet in height, roofs shall have drainage systems that are architecturally integrated into the building design.
- D. Any external stairwells, corridors and circulation components of a building shall be architecturally compatible with the overall structure, through the use of similar materials, colors, and other building elements.

17.7.2.4: Additional Standards for Mixed-Use Zone Districts

A. Building Transparency:

Any institutional, mixed use, commercial or light industrial building façade oriented towards a public or private street and located within the front setback shall be designed so that the ground-floor façade includes clear glass windows and doors to increase pedestrian interest.

These openings shall be arranged so that the uses are visible from and to the street on 50 percent or more of that portion of the façade located between 2 feet and 10 feet above grade (See Figure 17.7.2).

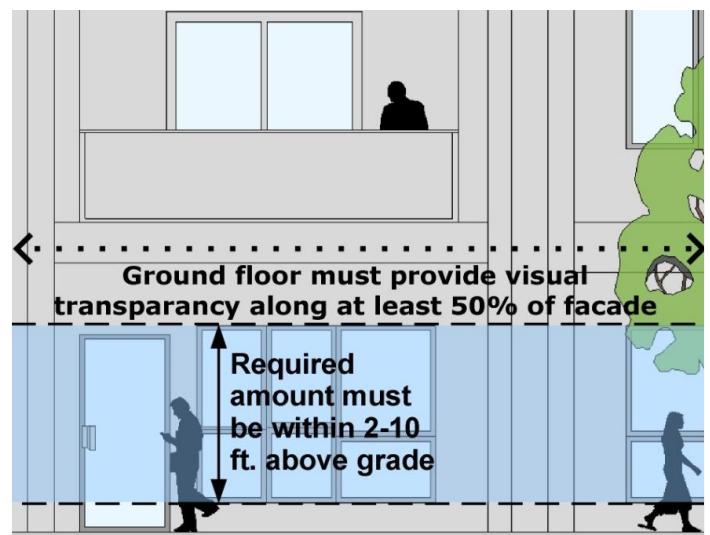


Figure 17.7.2: Ground Floor Transparency

B. Building Transparency Alternatives:

1. Up to 40 percent of the Building Transparency requirement may be satisfied with windows on the ground floor located outside of the transparency zone; or
2. Up to 40 percent of the Building Transparency requirement may be satisfied with display cases; or
3. Up to 20 percent of the Building Transparency requirement may be satisfied with permanent art displays; or
4. In no instance shall more than 40 percent of the Building Transparency requirement may be satisfied through a combination of windows outside the transparency zone, display cases, or permanent art displays.

C. Building Entrances:

1. Within the Suburban context, all institutional, mixed use, commercial or light industrial buildings and ground floor users shall have a primary entrance either facing an adjacent street, placed at an angle not more than 45 degrees from an adjacent street, or within 100 feet of the adjacent street on a perpendicular façade.
2. Within the Urban context, except the M-C-U district, all institutional, mixed use, commercial or light industrial buildings and ground floor users shall have a primary entrance either facing an adjacent street, placed at an angle not more than 45 degrees from an adjacent street, or within 50 feet of the adjacent street on a perpendicular façade.
3. Within the Transit context and the M-C-U district, all institutional, mixed use, commercial or light industrial buildings and ground floor users shall provide a primary entrance facing an adjacent street or placed at an angle up to 45 degrees from an adjacent street
4. Within all zoning district contexts, courtyards, plazas and similar entry features may be utilized to satisfy the building entrance requirement when these features are designed to connect the adjacent street edge to the main building entrance

17.7.3: Screening of Utility Structures, Outdoor Storage and Service Areas

17.7.3.1: General Standards

The following standards are intended to reduce the visual impact of certain site elements.

- A. Utility boxes or equipment on private property shall not be located along a public street frontage.
- B. Landscape and structural elements shall be used to screen utility structures, service areas, loading docks, outdoor storage, recycling facilities, and trash containers.
- C. Screening shall be established on all sides of such elements except where an opening is required for access. If access is possible only on a side that is visible from a public street, a solid gate or door shall be required.
- D. Required screening shall result in an opaque barrier to a minimum height of 6 feet and be provided in the form of new or existing plantings, walls, fences, topographic changes, buildings, horizontal separation, or a combination of these techniques.
- E. Where structural forms of screening are utilized, the materials shall match the primary building materials and colors, or provide a comparable level of quality.
- F. Trash and recycling enclosures shall be covered with a roof or they shall be self-contained.

17.7.4: On-Site Circulation Standards

17.7.4.1: Sidewalk Design Standards

The on-site circulation system shall be designed to provide safe pedestrian paths throughout the site and shall integrate with adjacent properties and neighborhoods.

- A. Internal sidewalk connections shall be required:
 - 1. Between the front doors of primary buildings;
 - 2. From buildings to all on-site facilities, such as parking areas, bicycle facilities, and open space;
 - 3. To connect to any transit stop that is adjacent to a site; and
 - 4. To provide direct access from all buildings on the site to existing or planned public sidewalks, adjacent multi-use trails, parks, and greenways.

- B. Internal sidewalks shall be barrier-free and unblocked at all times.
- C. Sidewalk crossings shall be clearly defined and marked through a change in paving materials, height, or use of distinctive color when a sidewalk crosses a parking lot or internal street or driveway.
- D. In order to create a safe pedestrian environment, multifamily residential buildings shall be placed and sited so that all required internal sidewalks are in view of at least one unit's living area windows.
- E. Internal sidewalks parallel and adjacent to a street or drive aisle shall use a raised walk or be separated from the street or drive aisle by a raised curb, landscaping or other physical barrier. If a raised internal sidewalk is used, the ends of the raised portions must be equipped with curb ramps.
- F. Internal sidewalks must be hard surfaced, and a minimum of 5 feet in width. When adjacent to perpendicular, head-in, or diagonal parking, a pedestrian walk must be increased in width to a minimum of 7 feet when parking is located on one side, and a minimum of 9 feet when parking is located on both sides
- G. Where a sidewalk is provided between two or more parallel buildings, the minimum distance between the buildings shall be 15 feet from building wall to building wall. Where a sidewalk is located between a property line and a building that is parallel to a property line, the minimum distance from the property line to the building shall be 7.5 feet. The sidewalk shall have a minimum width of 5 feet.

17.7.4.2: Internal Street Connectivity for Mixed-Use Zone Districts

In the Urban and Transit contexts, any development 5 acres or greater in size shall provide for public and private street connections into and through the site at a maximum of every 600 feet to increase pedestrian and vehicular connectivity and all spacing standards shall be met (See Figure 17.7.3). New streets shall connect to the existing street network, unless one or more of the following factors applies:

- A. Grade changes within the site make it impossible to connect with adjacent streets.

- B. The area surrounding the site already has patterns of through streets allowing circulation and the Director determines that additional street connections through the site would not significantly improve circulation or reduce congestion on surrounding streets.

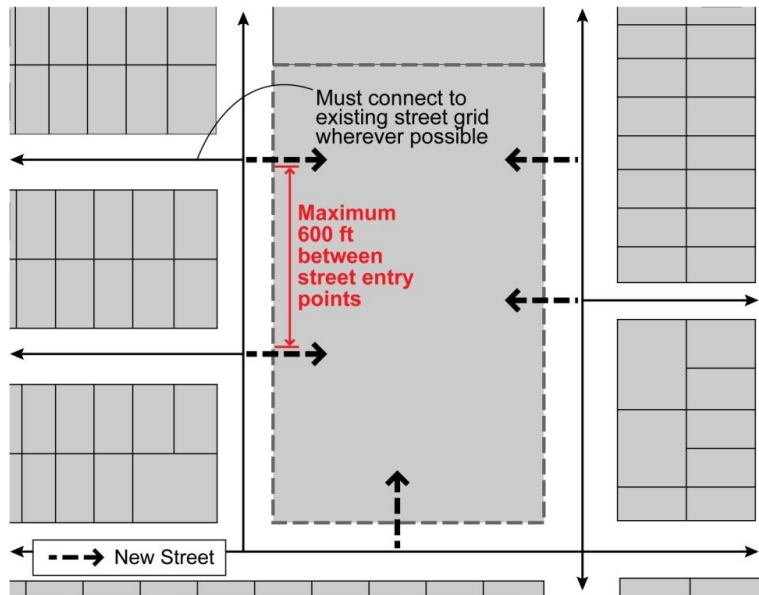


Figure 17.7.3: Street Connectivity

17.7.5: Open Space and On-Site Amenities

17.7.5.1: General Standards

The following open space design standards are intended to enhance the overall site layout and ensure that open space is designed as an accessible amenity.

- A. All development or redevelopment requiring a site plan per Article 2 of this Zoning Ordinance must meet the open space requirements set forth in Article 5.
- B. Open space areas should be visible from adjacent streets or pedestrian areas to the greatest extent possible.
- C. Stormwater detention areas should be integrated into the site design and used as an amenity to the greatest extent possible.

17.7.5.2: Additional Requirement for Mixed-Use and Commercial Zone Districts

In order to provide enhanced pedestrian amenities on larger sites, plaza space shall be required when a multifamily residential, commercial, or mixed use development or redevelopment involves a gross site area greater than 2 acres, the following shall apply:

- A. The plaza space shall consist of the following minimum percentage of the overall open space requirement as identified in Article 5:

Table 17.7.1: Plaza Space Requirement	
Zone District or Context	Minimum Percentage of Overall Open Space Requirement
Suburban	35%
Urban	45%
Transit	55%

- B. When a plaza is required as a percentage of the overall required open space, the plaza space shall incorporate the following element
1. One linear foot of seating shall be provided for every 30 square feet of plaza area and/or public space. The seating space requirement may be met by providing benches, chairs, and/or seat-walls. Benches and seat-walls accessible from both sides and 33 inches or greater in depth may count both sides toward the seating requirement.
- C. In addition to the requirements in Section 17.7.5.2.B, plaza spaces must provide at least 2 of the following elements:
1. Shade structures such as pergolas, canopies, awnings, arcades, or other similar elements.
 2. In addition to trees required to satisfy the open space requirement, trees shall be provided at a rate of one tree per 800 square feet of plaza or public space area.
 3. Water features or public art.
 4. Activity areas including but not limited to outdoor cafes, retail spaces, and/or programmed spaces that accommodate entertainment, meetings, educational activities, and play areas
 5. Pedestrian-scale information kiosk

17.7.6: Standards for Motor Vehicle Design Elements

17.7.6.1: General Standards

This Section establishes design standards for the construction of drive-through facilities, car wash facilities, fueling stations and parking structures.

17.7.6.2: Drive-Through Facility

A drive-through facility shall be subject to the following standards:

- A. Uses with drive-through facilities shall be located only on properties with frontage on an arterial or collector street.
- B. Speakers shall not be oriented towards an adjacent residential zone district unless an intervening building exists. Where an intervening building does not exist, the following shall also apply to minimize the speaker noise impact on an adjacent residential property:
 - 1. If the speaker is located within 15 feet of the property line, a solid wall with a minimum height of 6 feet shall be installed on the property line.
 - 2. If the speaker is located 15 feet or more from the property line, a solid fence with a minimum height of 6 feet shall be installed on the property line.

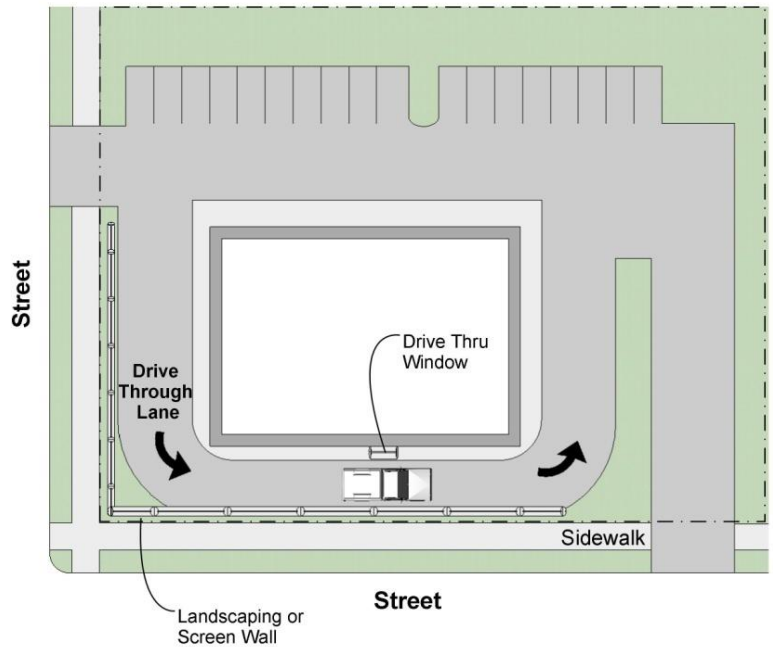


Figure 17.7.4: Suburban Context – Landscaping or Screen Wall and Drive-Through Location

C. In mixed-use zone districts, a drive-through facility shall be subject to the following:

1. In the Suburban context, a drive-through lane may be located in the area between a building and a public street. The drive-through lane shall be screened from the public street by landscaping or a low decorative wall to a minimum height of 42 inches and a maximum height of 48 inches. If a low screen wall is installed, the construction material shall match the first floor exterior color and materials used on the primary building or provide a comparable level of quality (See Figure 17.7.4).
2. In the Urban context, a drive-through lane shall not be located in the area between a building and a public street and the drive-through windows shall not face a public street (See Figure 17.7.5).
3. In the Transit context, a drive-through lane shall be designed so that it is enclosed within the envelope of the building, the drive-through windows are not visible from adjacent public streets and the drive-through lane shall not be located in the area between a building and a public street (See Figure 17.7.6)

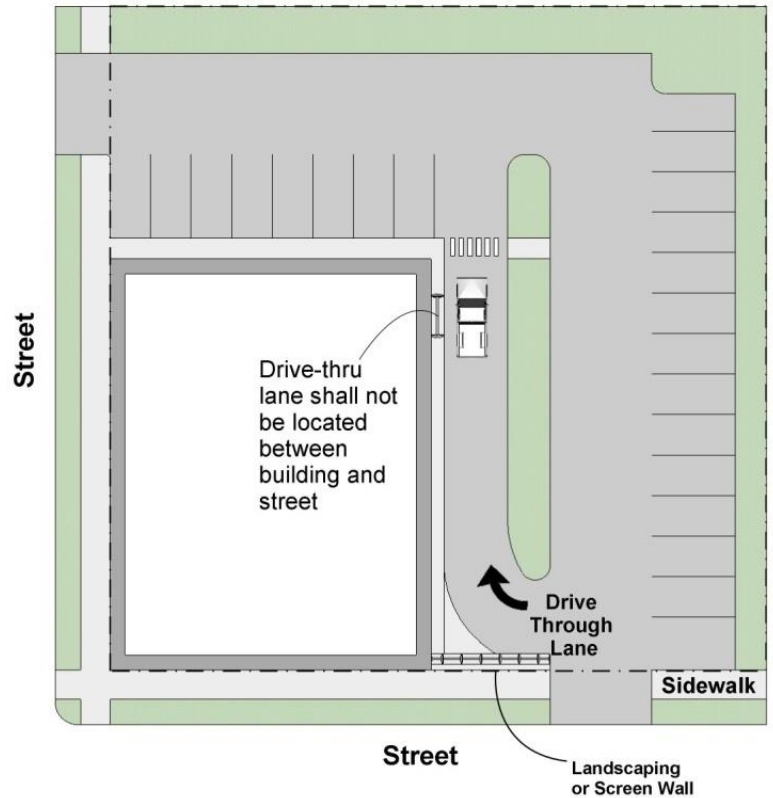


Figure 17.7.5: Urban Context – Landscaping or Screen Wall and Drive-Through Location

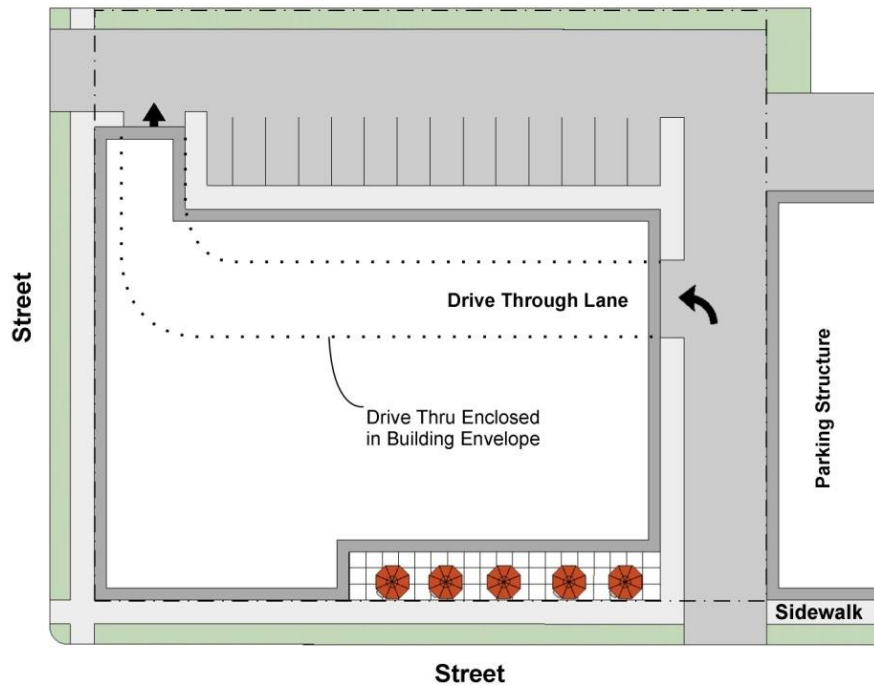


Figure 17.7.6: Transit Context – Drive-Through Enclosed in Building Envelope

17.7.6.3: Motor Vehicle Service Facility

A. Car Wash Facility:

1. Openings to wash bays or wash tunnels shall not face an adjacent residential zone district (See Figure 17.7.7).
2. Openings to wash bays or wash tunnels shall not face, or shall be adequately screened through landscaping from a public right-of-way.
3. Landscaping or a low screen wall to a minimum height of 42 inches and a maximum height of 48 inches shall be provided on the property adjacent to all public streets in front of the wash bay or tunnel, except at access drive locations.
4. Vacuuming equipment associated with the car wash shall not be placed adjacent to or face a residential zone district, unless an intervening building exists between the vacuum equipment and residential zone district.



Figure 17.7.7: Car Wash Bay Location

5. A car wash facility associated with a motor vehicle fueling station shall be constructed of materials that match the first floor exterior material used on the primary building.
6. In the Transit context, a car wash shall not be an allowed use.

B. Fueling Station:

1. A fueling station shall be located only on a property with frontage on an arterial or collector street.
2. In mixed-use zone districts, a fueling station shall be subject to the following:
 - a. In the Suburban context, the pump canopy shall meet the primary structure Build-to-Zone standards identified in Table 17.5.2. The retail building or convenience kiosk associated with the fueling station may be located behind the pump canopy (See Figure 17.7.8).
 - b. In the Urban context, the retail building or convenience kiosk associated with the fueling station shall meet the primary structure Build-to-Zone standards identified in Table 17.5.2, except that the building or kiosk shall only be required to meet 50 percent of the Build-to-Zone requirement. The pump canopy may be located behind or to the side of the building or kiosk (See Figure 17.7.9).
 - c. In the Transit context, the retail building or convenience kiosk associated with the fueling station shall meet the primary structure Build-to-Zone standards identified in Table 17.5.2. The pump canopy shall only be located behind the building or kiosk (See Figure 17.7.10).

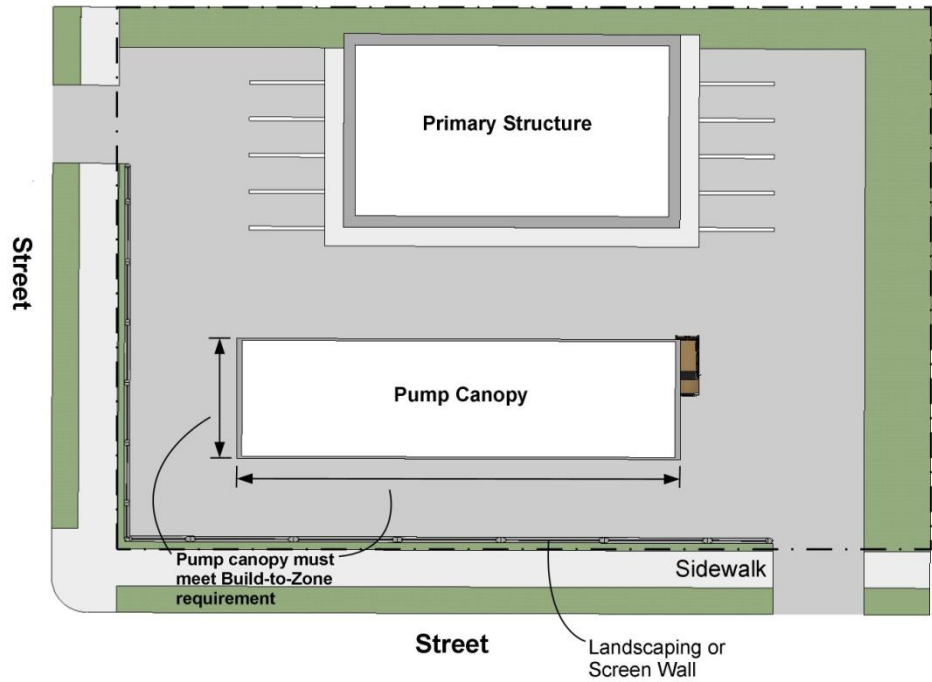


Figure 17.7.8: Fueling Stations in Suburban Context

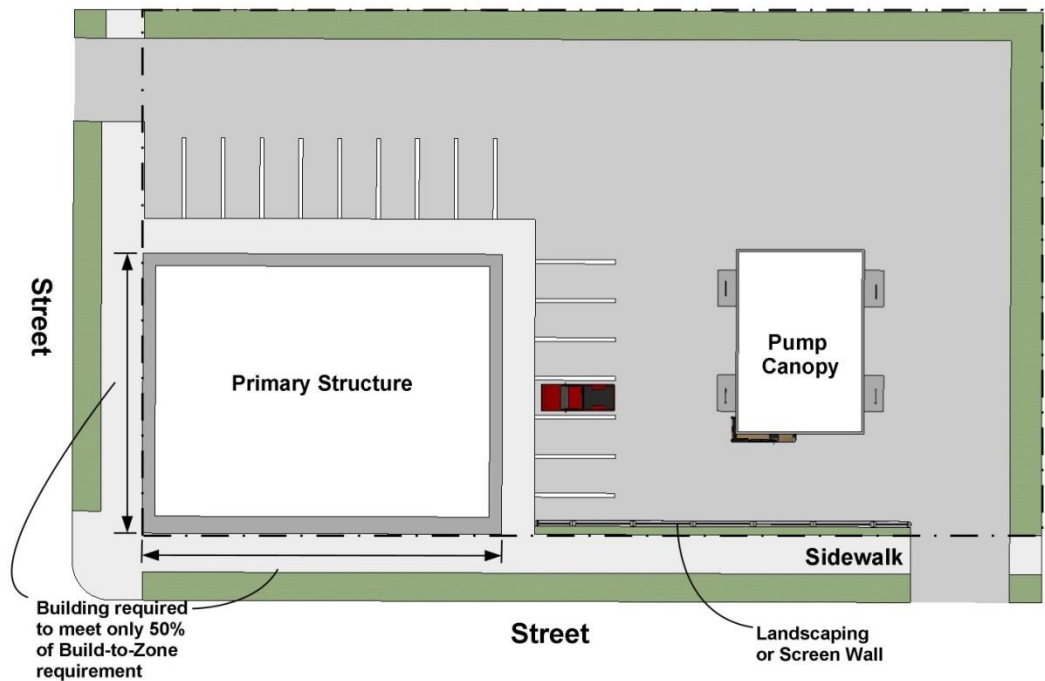


Figure 17.7.9: Fueling Stations in Urban Context

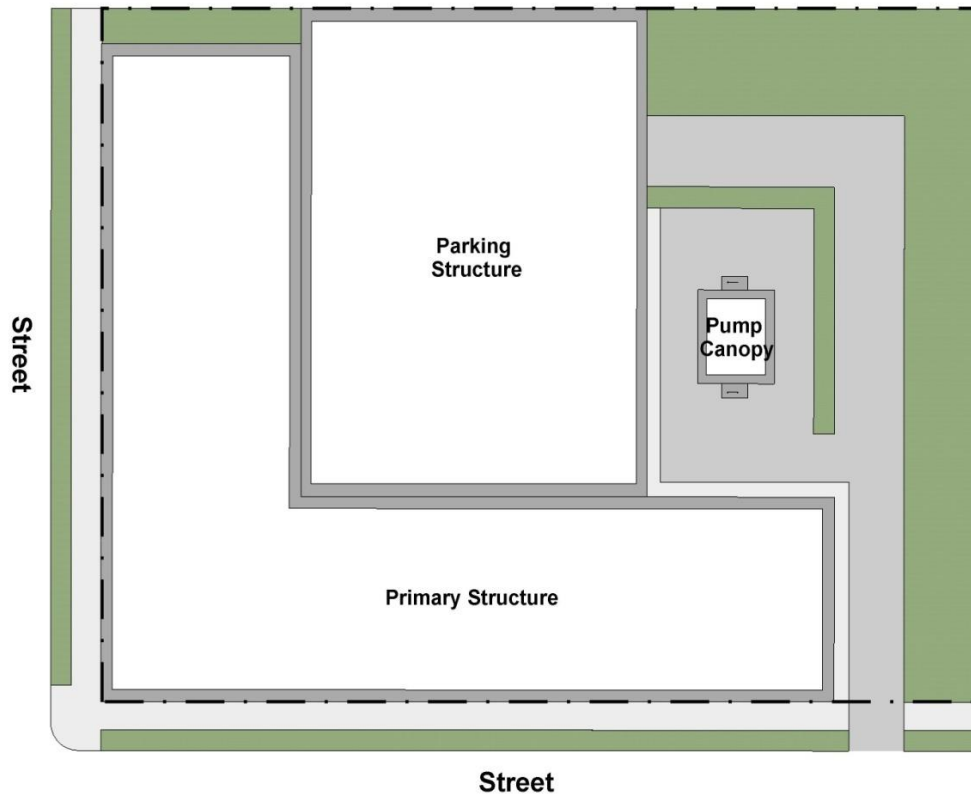


Figure 17.7.10: Fueling Stations in Transit Context

3. The pump canopy shall match the architectural style of the convenience store or service kiosk associated with the facility in terms of color, facing materials, and roof pitch.
4. A pump canopy shall not exceed 20 feet in height for a parapet roof. A pitched roof element may extend above the height limit.
5. Landscaping or a low screen wall to a minimum height of 42 inches and maximum height of 48 inches shall be provided on the property adjacent to all public streets in front of the pump canopy, except at access drive locations.
6. Service bay doors shall not face an adjacent residential zone district unless there is a building between the service bay doors and the residential zone district. Within the Urban and Transit contexts, service bay doors shall not face a public street.

17.7.6.4: Parking within a Building or Structure

- A. Façade openings that face a public street or open space shall be vertically and horizontally aligned and all floors fronting on those façades shall be level, not inclined.
- B. The first floor façade of a parking structure located adjacent to a public street shall be designed to encourage and complement pedestrian-scale interest and activity through

the inclusion of at least three architectural elements such as arcades, windows, awnings, overhangs, screens, grills, louvers or other similar non-opaque features.

- C. Parking structures shall be designed so that motorized vehicles parked on all levels of the structure are screened to a minimum height of 42 inches.
- D. Within the Urban context, the ground floor façade of a structured parking facility that abuts a public sidewalk, street, or open space and that is not occupied by entrances, exits, or waiting areas shall be designed and constructed with a minimum unfinished floor to ceiling height of 14 feet in order to allow occupancy by uses other than parking that are allowed in the underlying zone district
- E. Within the Transit context, structured parking facilities located adjacent to a public street shall contain retail or office uses on the first floor fronting the street, or be wrapped with development of equal or greater height than the parking structure. At least 50 percent of a street-level facing a public sidewalk, street, or open space area shall contain retail or office uses to a minimum depth of 60 feet.

17.7.7: Landscape Design Standards

17.7.7.1: General Standards

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction:

- A. Any portion of a site not utilized for buildings, structures, parking, driveways, service areas or storage areas shall be considered a landscape area.
- B. Plantings shall be arranged to promote energy conservation to the greatest extent possible. Where practicable:
 - 1. Deciduous trees which are sun tolerant shall be placed on the south and west sides of buildings to provide shade from summer sun.
 - 2. Evergreens and other plant materials which are shade tolerant shall be concentrated on the north side of buildings to dissipate the effect of winter winds.
- C. Drought tolerant landscaping and design is required as part of the overall landscape theme. Drought tolerant landscaping techniques include, but are not limited to, using native and/or low-water plants, employing water-conserving irrigation techniques and systems, and reducing the percentage of turf coverage
- D. Evergreen trees shall not be used in the tree lawn or within 8 feet of a public walk
- E. Artificial trees, shrubs, turf or plants shall not be used to fulfill the minimum requirements for landscaping as required by this Article.

17.7.7.2: Street Tree Placement

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction.

- A. One deciduous street tree shall be provided for every 35 lineal feet of street frontage. Street trees shall be evenly spaced along the street frontage.
 - 1. Where a detached sidewalk exists, the tree shall be placed between the edge of asphalt or curb and sidewalk.
 - 2. Where the sidewalk is attached to the street and not required to meet current sidewalk standards, shade trees shall be established in an area ranging from 4 to 8 feet behind the sidewalk.
 - 3. Wherever the sidewalk is attached to the street and is 9 feet or more in width, shade trees shall be established in planting cutout areas that are a minimum of 25 square feet of planting area.
- B. The Director shall provide a recommended list of trees which shall be acceptable to satisfy the requirements for landscape plans, including approved canopy shade trees that may be used as street trees.
- C. Trees shall be located to avoid significant interference with overhead or underground utilities, including lateral connections. A tree canopy may project over a right-of-way or easement.
- D. Ornamental trees may be planted in substitution of the canopy shade trees where overhead lines and fixtures prevent normal growth and maturity.
- E. Plant materials shall be located to avoid interference with vehicular and pedestrian movement. Plant materials shall not project over sidewalks, paths, or trails below a height of 8 feet at maturity.

17.7.7.3: Institutional, Mixed-Use, Commercial, and Light Industrial Landscape Standards

In addition to the general landscape standards, this Section establishes the standards for landscaping that is specific to Institutional, Mixed-use, Commercial, and Light Industrial development. All landscape areas shall meet the following minimum requirements.

- A. One tree and three shrubs shall be provided for every 550 square feet of landscape area. Tree lawn areas, parking lot landscape areas and landscape buffer areas are counted separately and independently from this requirement.
- B. In situations where it is not practical to plant a tree on site, trees may be replaced at a ratio of 10 shrubs or 20 ornamental grasses to one tree. Tree substitution is at the discretion of the Director.
- C. Landscape areas shall have a minimum of 50 percent living ground or drought tolerant landscaping approved by the Director, and shall grow to the required landscape coverage within 5 years of installation.

D. Whenever an institutional, mixed-use, commercial or light industrial zone district directly abuts a single-family dwelling or duplex residential use within a single-family dwelling or duplex zone district, one of the following transition options shall be installed in lieu of these landscaping requirements (See Figure 17.7.11):

a. Option A: A landscaped area with a width of 30 feet shall be provided along the property line. Canopy shade trees, evergreen trees, and shrubs shall be provided in the following numbers per 100 lineal feet of adjacency:

i. Three trees, and

ii. Twenty shrubs.

b. Option B: A landscaped area with a width of 20 feet shall be provided along the property line. Canopy shade trees, evergreen trees, and shrubs shall be provided in the following numbers per 100 lineal feet of adjacency:

i. Four trees, and

ii. Twenty-four shrubs.

c. Option C: A 6-foot tall solid fence or wall shall be provided along the property line. Brick or stone columns must be incorporated into the fence or wall design and spaced at least every 32 feet. A landscaped area with a width of 10 feet shall be provided adjacent to the fence. Canopy shade trees, evergreen trees, and shrubs shall be provided in the following numbers per 100 lineal feet of adjacency:

i. Three trees, and

ii. Ten shrubs.

d. Option D: A 6-foot tall wall brick or stone or comparable material with brick or stone columns spaced at least every 32 feet may be installed in-lieu of landscaping for sites containing 25 or fewer parking spaces.

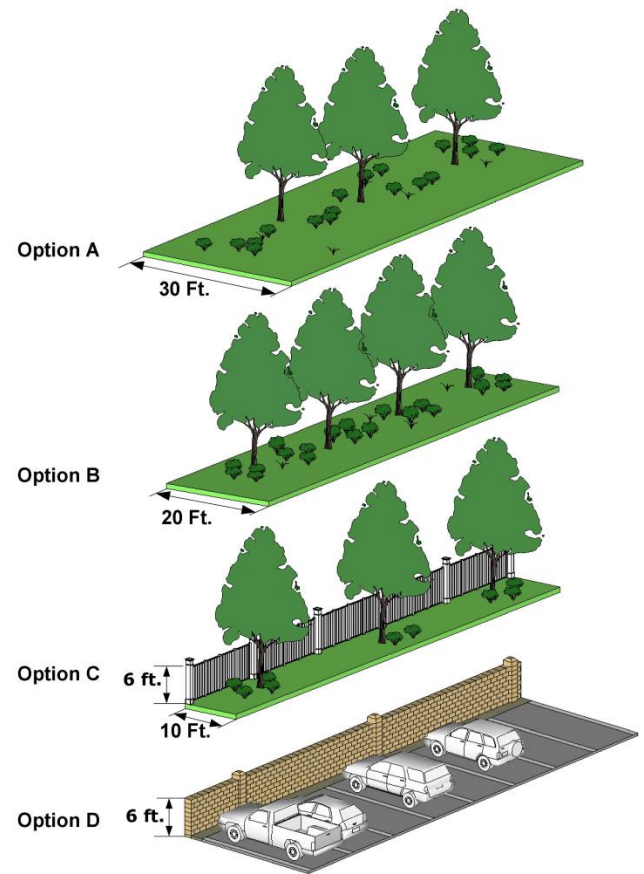


Figure 17.7.11: Side and Rear Transition Areas

17.7.7.4: Landscape Materials

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction.

- A. The selection of plant materials shall be based on the City of Lakewood's climate, site conditions and recommended plant material list approved by the Director.
- B. All plants shall be free of any defects, of normal health, height, leaf density, and spread appropriate to the species as defined by American Nursery and Landscape Association standards.
- C. To prevent uniform insect or disease susceptibility and eventual uniform maturity and agedness on a development site or in the adjacent area or the district, species diversity is required and monocultures are prohibited. The following tree species requirements identified in [Table 17.7.2](#) shall apply to site development plans:

Table 17.\

Table 17.7.2 Tree Species	
Number of required trees	Maximum percentage of any tree species
10 - 19	75%
20 - 39	60%
40 or more	50%

- D. The following minimum tree and shrub sizes identified in [Table 17.7.3](#) shall be required.

Table 17.7.1

Table 17.7.3 Tree and Shrub Sizes	
Type	Minimum Size
Canopy Shade (Deciduous) Tree	2.5" caliper balled and burlapped or equivalent
Evergreen Tree	6.0' height balled and burlapped or equivalent
Ornamental Tree	1.5" caliper balled and burlapped or equivalent
Shrubs	5 gallon or a size consistent with design intent
Note: Any tree or shrub plantings that are in addition to the minimum required by this Article are exempt from the foregoing size requirements.	

17.7.7.5: Landscape Installation

- A. To the maximum extent feasible, topsoil that is removed during construction activity shall be conserved for later use on areas requiring revegetation and landscaping.

- B. All landscaping shall be installed according to the American Nursery and Landscape Association horticultural practices in a manner designed to encourage quick establishment and healthy growth.
- C. Whenever the installation of required landscaping is not possible by the time construction on the primary structure or primary use parking lot has been completed, the City may authorize a delay in installation until no later than May 31st of the next calendar year.
- D. All landscaping in each development or development phase shall be installed prior to issuance of a certificate of occupancy. As a condition of authorizing a delay in installation, the City may:
 - 1. Require that a surety or other guarantee, in a form acceptable to the City, be provided in the amount of 150 percent of the value of the landscaping; or
 - 2. Issue a temporary certificate of occupancy, with the permanent certificate of occupancy to be issued following installation of all required landscaping.

17.7.7.6: Landscape Maintenance

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction:

- A. Trees and vegetation, irrigation systems, and other landscape elements shall be considered elements of the project in the same manner as parking, building materials, and other site details. The applicant, landowner, or successors in interest shall be responsible for the regular and proper maintenance of all landscaping elements installed on the right-of-way, or on private property from the back of curb of the street to keep them in good and healthy condition.
- B. All landscaping shall be maintained free from disease, pests, weeds, litter and all landscape structures shall be repaired and replaced as necessary to maintain a structurally sound condition.
- C. Any required element that fails, dies, or is otherwise damaged or removed, shall be replaced within 30 days, or by May 31st of the next calendar year, if it is found dead during the winter months.
- D. Landscape and utility plans shall be coordinated to provide ease of future maintenance and to prevent conflicts between tree and shrub plantings and utilities. Tree/utility separations shall not be used as a means of avoiding the planting of required street trees.

17.7.7.7: Existing Tree Preservation

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction.

- A. Existing trees greater than 8-inch caliper, measured 1 foot above grade, within a development shall be preserved to the extent reasonably feasible and will help satisfy the landscaping requirements of this Section. Such trees shall be considered protected trees within the meaning of this Section. Streets, buildings, and lot layouts shall be designed to minimize the disturbance to protected trees.
- B. The Director shall determine through consultation with the City Forester when it is not feasible to preserve and retain protected tree(s) or to transplant them to another on-site location. If it is determined that it is not feasible to preserve or transplant protected tree(s), the applicant shall replace such tree(s) according to this Section. Replacement trees shall be used to satisfy the tree planting standards of this Section.
- C. Trees that meet one or more of the following removal criteria shall be exempt from the requirements of this subsection as follows:
 - 1. Dead, dying or naturally fallen trees, or trees determined by the City to be a threat to public health, safety, or welfare;
 - 2. Trees that are determined by the City to substantially obstruct clear visibility at driveways and intersections;
 - 3. Tree species that constitute a nuisance to the public as determined by the City include Cottonwoods, Siberian Elms, Russian Olives, and Female Box Elders. Native cotton bearing Cottonwood trees and Female Box Elder trees as well as any other species of tree, are not considered nuisance trees when they are located near a property line and are used to create a buffer between any land uses.
 - 4. Trees that are determined by the Director to prohibit reasonable use or development of a site may be replaced following the standards in Section 17.7.7.8.
- D. All existing street trees that are located on City rights-of-way or easements adjacent to a development and all trees located on private property shall be accurately identified by species, size, location, and condition on required landscape plans.
- E. The following tree protection standards shall be followed for all projects with protected existing trees:
 - 1. Within the drip line of any protected tree, there shall be no cut or fill over a 4-inch depth unless the City Forester has evaluated and approved the disturbance.
 - 2. Prior to and during construction, a fenced tree protection zone, formed by barriers, shall be erected and maintained around all protected trees at the drip line.
 - 3. The installation of utilities, irrigation lines, or any underground fixture requiring excavation deeper than 6 inches shall be accomplished by boring under the root system of protected existing trees at a minimum depth of 24 inches.

17.7.7.8: Tree Replacement

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction.

- A. Trees that are removed following the standards outlined in Section 17.7.7.C.4 shall be replaced at a rate of 100 percent of the total caliper of trees removed from the site.
- B. Each tree to be replaced shall be a minimum of 3-inch caliper or 8 feet in height for evergreens.
- C. If a property owner chooses not to replace the total caliper of trees on-site, the owner may make a cash payment of \$1,200.00 per tree into a tree fund which shall then be used to replace trees on public property in the Ward in which the property is located.
- D. When the development causes any disturbance within any natural area on a property, replacement shall occur as required in this Section.

17.7.8: Fence and Wall Design Standards

17.7.8.1: General Standards

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction:

- A. No fence, wall, trellis, pergola, or arbor shall be erected without a fence and/or building permit unless these structures are less than 8 feet long and 6 feet high.
- B. Retaining walls greater than 3 feet in height require a building permit and must satisfy all engineering design requirements.
- C. A temporary fence permit may be issued in conjunction with an active building permit. A temporary fence permit may be granted for a one-year renewable period. All temporary fencing must be removed upon completion of construction and prior to the issuance of a certificate of occupancy.
- D. Walls, when applicable, shall be constructed using the same or similar materials as the main building.
- E. Fences and walls shall be installed so that a finished side faces a public street or public space.
- F. Fences and walls shall follow the contour of the ground as far as practicable. Adjustments for grade shall occur at the bottom of the fence to every extent possible.
- G. Permanent fencing and walls shall not be erected which restricts access by emergency equipment to any building.
- H. Fences and walls no longer maintained in a safe manner and/or which create a hazard through neglect, lack of repair, manner of construction, method of placement, or otherwise, shall be repaired, replaced or removed by the property owner. Examples of lack of maintenance shall include, but are not limited to, protruding or exposed wire, missing and/or protruding pickets, missing sections of fence, sagging or leaning pickets and supports, extending into a traveled sidewalk or creating a hazard for a pedestrian or motor vehicle.

- I. Solid fencing or wall sections along a street totaling more than 200 linear feet shall include architectural features, such as masonry, brick or wood-framed columns for every 50 feet of length. The minimum separation between those features shall be no less than 10 feet.
- J. Approved columns or posts may exceed the height of the fence by 1 foot and must meet all setback requirements.

17.7.8.2: Fence and Wall Height

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction:

- A. [Table 17.7.4](#) identifies the permitted location, type of fence, maximum height and minimum setback for fences (See Figure 17.7.13).
- B. All fence, wall and structure heights shall be measured from the lowest finished grade at the location of the fence, wall or structure.
- C. An entry feature or entry trellis may exceed the 6-foot height standard in Section [17.7.8.2:A](#) by up to 4 feet for a maximum height of 10 feet and the entry feature or entry trellis may be a maximum width of 10 feet.
- D. Solid fences and walls may be erected to a height of 8 feet to separate a property from an arterial street or a frontage road adjacent to US 6 and US 285 highways. The Director shall consider the aesthetic, visual, and noise reduction characteristics of the fence or wall.
- E. A combination fence and retaining wall may be erected to a height of 6 feet above the highest finished grade or 8 feet above the lowest finished grade, at the location of the fence, except that at no time shall the fence portion exceed 6 feet above the highest finished grade at any point (See Figure 17.7.12).
- F. A retaining wall cannot be built for the purpose of elevating a fence to any height more than allowed by this Section.

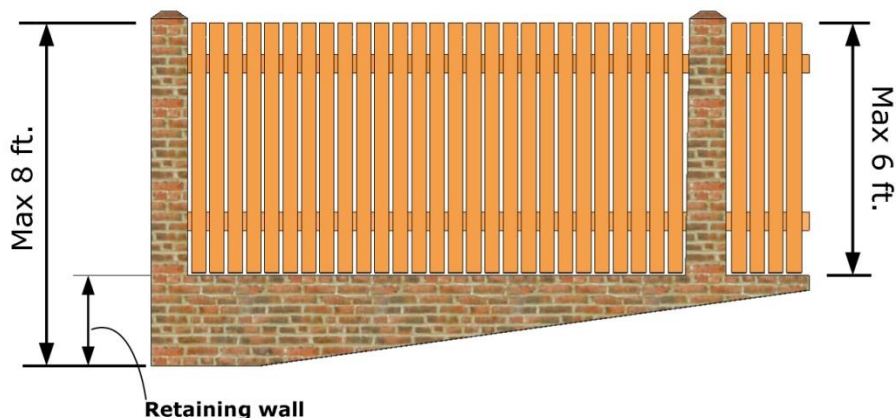


Figure 17.7.12 Fence Wall Combination

Table 17.7.4 Fence and Wall Standards				
Land Use	Permitted Location	Type of Fence Permitted	Maximum Height	Minimum Setback
Institutional, Mixed Use, Office and Commercial	Side, rear and non-primary front yards	Open, solid	6'	Property line and 2' back of walk
	Front yard or build to zone	Open, solid (Director discretion)	6'	Property line and 2' back of walk
Industrial	Side and rear yards	Solid	7'	Property line and 2' back of walk
	Side and rear yards	Barbed Wire	7', but not below 6'	Property line and 2' back of walk
	Front and non-primary front yard or build to zone	Open, solid (at the discretion of the Director)	7'	Property line and 2' back of walk
Public Utility Installations	Front, side and rear yards or build to zone	Open, solid	7'	
	Side and rear yards	Barbed Wire	7', but not below 6'	
Solar Garden	Front and non-primary front yard	Open	8'	Property line and 2' back of a walk
	Side and rear yards	Open or solid (when adjacent to a residential unit or residentially zoned property)	8'	
Recreational Facilities	Side and rear yards	Open	10'	15' from property line and 2' back of walk
Noise Control Walls and Fences	Rear and non-primary front yards adjacent to arterial streets; Any yard adjacent to frontage roads on US 6 and US 285	Solid masonry or wood with pickets on both sides of the horizontal boards. Pickets must be a minimum of 3/4-inch-thick and staggered from the opposite pickets.	8'	

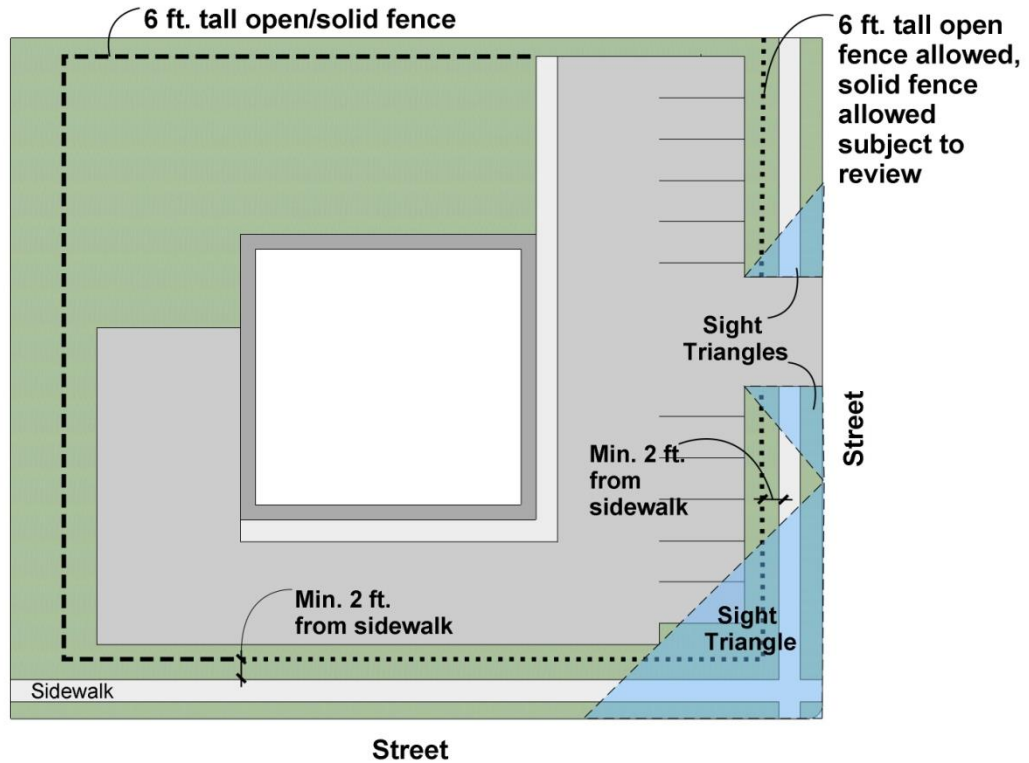


Figure 17.7.13 Commercial Fence Setbacks and Height Restrictions

17.7.8.3: Fence and Wall Placement

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction:

- A. No portion of a fence or wall shall extend beyond the property line of the fenced property into the public right-of-way without approval of the Director. It may also be necessary to obtain a License Agreement prior to erecting a fence in the public right-of-way.
- B. All fences and walls including fence support systems such as posts, pillars and columns shall be set back a minimum of 2 feet from the back edge of the sidewalk or traveled walkway to allow for safe passage by persons on a sidewalk or traveled walkway.
- C. Vehicle access gates must be setback at a minimum 20 feet from flow line of the street or back of curb in order to meet vehicle stacking requirements.
- D. Gates adjacent to sidewalks, alleys and public rights-of-way shall open inward to the private property.
- E. All fence locations on through-lots shall be reviewed on a case-by-case basis by the Director following the waiver criteria specified in Section 17.2.5 of this Zoning Ordinance.
- F. A 4-foot fence that is a minimum of 50 percent open may be permitted within a sight triangle with review and approval of the City of Lakewood Traffic Engineering Division (See Figure 17.7.14).



Figure 17.7.14 Fifty-percent Open Fence

- G. Where a corner lot is permitted to have a solid fence along a non-primary front property line that coincides with an adjacent property's primary front yard, no fence will be permitted that creates a hazard for vehicles exiting that property or for pedestrians walking along a sidewalk or traveled walkway.

17.7.8.4: Fence and Wall Materials

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction:

- A. Approved materials for fence construction include, but are not limited to, commercial quality wood, brick, masonry, metal, stone, wrought iron, manufactured vinyl or PVC fence material or any other material approved by the Director following the waiver criteria specified in Section 17.2.5 of this Zoning Ordinance
- B. Prohibited fence materials shall include, but are not limited to, aluminum siding, vehicles, smooth face concrete masonry units/blocks, cloth or plastic tarps, scrap wood or any other material not customarily sold for fencing in the Denver Metropolitan area.
- C. Approved materials for wall construction include, but are not limited to, commercial quality brick, decorative masonry units, or decorative concrete or any other material approved by the Director following the waiver criteria specified in Section 17.2.5 of this Zoning Ordinance.
- D. Prohibited wall materials shall include, but are not limited to, landscape timbers, smooth face concrete masonry units/blocks, and other materials not customarily sold for retaining walls in the Denver Metropolitan area.

- E. Combination fences of lattice and other decorative materials may be used in conjunction; however, at no time shall the combination exceed the fence height limitation for that zone district.
- F. All material used in wood fences shall be either naturally rot resistant (such as cedar), or pressure treated for rot resistance.
- G. Plastic or temporary construction fence may not be used as a permanent fence material.

17.7.9: Exterior Lighting Standards

17.7.9.1: General Standards

The following standards shall apply to all institutional, mixed-use, commercial, and light industrial additions or new construction:

- A. Unless specifically excluded by this Zoning Ordinance, any building or structure, including any accessory building or structure, shall conform to the lighting requirements for the applicable zone district as set forth in this Zoning Ordinance.
- B. All light fixtures shall be fully shielded and direct light downward toward the earth's surface (See Figure 17.7.15).
- C. All lighting sources shall be directed away from reflective surfaces to minimize glare upon adjacent property and public rights-of-way.
- D. All lighting sources shall be positioned in such a manner as to direct light away from adjacent property and public rights-of-way.
- E. All light fixtures on structures, canopies, poles, stands, or mounted on a building shall have a shield, adjustable reflector, and non-protruding diffuser.
- F. Lighting under awnings and canopies shall primarily illuminate a building front, landscaping, a sign under an awning or canopy, or the sidewalk, and not directly illuminate the awning or canopy itself.
- G. Light pole height shall not exceed 25 feet in height except in industrial zones districts where light pole height shall not exceed 35 feet.
- H. Light poles shall be measured from the base of the light pole at ground level to the top of the light fixture.
- I. Light poles adjacent to single-family and two-family uses shall be setback from the property line the same distance as the pole height or if fully shield a minimum of 5 feet.
- J. All parking area light fixtures shall be designed and located to confine emitted light to the parking area.
- K. Light meter readings shall not exceed:
 - 1. One-half foot-candles at a single-family dwelling or duplex property line; or

2. One foot-candle at an attached dwelling or multifamily residential property line; or
3. Two foot-candles at all other non-residential property lines.
4. It should be understood that, with all of these measurements, light will still be visible at or beyond property lines.

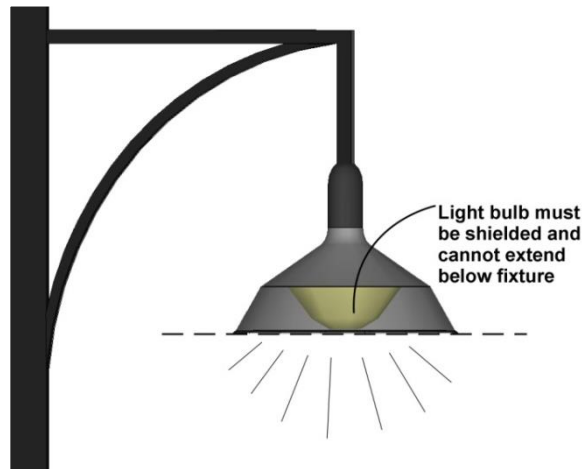


Figure 17.7.15: Lighting – Downcast and Shielded

17.7.9.2: Exceptions

Exceptions to the lighting standards include, but may not be limited to:

- A. Hazard warning lighting required by Federal and State regulatory agencies.
- B. Temporary emergency lighting required by local law enforcement, emergency service and utility department(s).
- C. Traffic control and directional lighting.
- D. Underwater lighting used for the illumination of swimming pools and water features.
- E. Lighting for temporary festivals and carnivals.
- F. No private recreational facilities shall be illuminated after 11:00 p.m. except to conclude a scheduled recreational or sporting event in progress prior to 11:00 p.m.
- G. Architectural accent and landscape lighting, up lighting and low wattage fixtures.

17.7.9.3: Prohibitions

The following lighting sources are prohibited:

- A. Laser lights or other high intensity outdoor lights.
- B. Searchlights and floodlights used for advertising purposes.
- C. Lighting sources used on towers except as required by the Federal Aviation Administration.