

- TUALATIN COMPREHENSIVE PLAN
PART II – ABOUT THE COMPREHENSIVE PLAN

Plan Implementation

Technical Memoranda		
BACKGROUND AND SUPPORTING DOCUMENTS ADOPTED AS PART OF THE COMPREHENSIVE PLAN		
Title	Year	Ordinance
<i><u>Economic Opportunities Analysis</u></i>	<u>2019</u>	<u>1480-23</u>
<i>Housing Needs Analysis</i>	2019	1450-20
<i>Parks and Recreation Master Plan</i>	2019	1427-19
<i>Sewer Master Plan</i>	2019	1427-19
<i>Water Master Plan</i>	2023	1476-23
<i>Transportation System Plan (TSP)</i>	2012	1354-13
<i>Natural Resource Inventory and Local Wetlands Inventory</i>	1995	979-97
<i>Historic Resource Technical Study and Inventory</i>	1993	844-91; 894-93
<i>Tualatin Drainage Plan</i>	1979	491-79
AREA-SPECIFIC CONCEPT PLANS		
<i>Basalt Creek Concept Plan</i>	2019	1418-19
<i>Southwest Tualatin Concept Plan</i>	2010	1321-11
<i>Northwest Tualatin Concept Plan</i>	2005	1191-05

Purpose

The purpose of this chapter is to guide employment uses, planning, and development in Tualatin. Tualatin's Buildable Lands Inventory and Economic Opportunities Analysis provide a basis for understanding the current trends and projected demand for new commercial and industrial land.

GOAL 4.1 ~~Encourage commercial development that provides employment opportunities, as well as access to goods and services for residents, employees, and the general community.~~ Ensure an adequate supply of employment land that is available and serviceable as identified in the Economic Opportunities Analysis.

POLICY 4.1.1 LOCATION. Locate and design areas that allow commercial development in a manner that increases access to goods and services while minimizing traffic impacts, including the location of commercial services where accessible through transit and active transportation modes, the encouragement of mixed use development, and small neighborhood commercial nodes.

POLICY 4.1.2 CRITICAL SERVICES. Provide for the continued development of major medical services and other critical infrastructure within the City of Tualatin.

POLICY 4.1.3 DESIGN. Encourage functional and attractive commercial development through standards for site design and landscaping.

POLICY 4.1.4 MIXED USE. Encourage mixed use commercial and residential development.

POLICY 4.1.5 Plan for infrastructure development to support commercial and industrial development.

POLICY 4.1.6 Coordinate the City's Transportation System Plan with planning for employment and business growth.

Strategic Actions

- Evaluate potential opportunities to make more efficient use of commercial and industrial land.
- Evaluate the establishment of a program to assist landowners to get their sites certified through the Business Oregon Certified Shovel Ready program or other similar development program.
- Evaluate development of a civic center with a range of supportive and complementary uses.

GOAL 4.2: ~~Encourage new industrial development~~ Support business retention, growth, and attraction in ways that strengthen the local tax base and support Tualatin's industrial lands as a major local and regional employment center.

POLICY 4.2.1 Preserve and protect, with limited exceptions, the City's existing industrial land.

POLICY 4.2.2 Fully develop planned industrial areas, providing full transportation, sewer, and water services prior to or as development occurs.

POLICY 4.2.3 Cooperate with Washington County, Metro, and the State of Oregon to study the methods available for providing transportation, water, and sewer services to growing industrial areas.

POLICY 4.2.4 Support growth of existing businesses, including growth and retention of entrepreneurial businesses, in Tualatin.

Strategic Actions

- Evaluate revision to the Economic Development Strategy to develop a clear vision for economic development, and create an action plan to implement the vision.
- Evaluate opportunities to revise City code and policy to attract or grow businesses with pay at or above Tualatin's average wage.
- Evaluate use of incentives to retain, grow, and attract businesses.
- Evaluate opportunities to support workforce development.

GOAL 4.3 Manage industrial impacts to the environment and other uses.

POLICY 4.3.1 Cooperate with the Department of Environmental Quality and Metro to meet applicable air quality standards.

POLICY 4.3.2 Protect residential, commercial, and sensitive industrial uses from the adverse environmental impacts of industrial use.

POLICY 4.3.3 Protect adjacent land uses from noise and adverse environmental impacts by adopting industrial noise and environmental impact standards.

POLICY 4.3.4 Protect environmentally sensitive areas, including the Hedges Creek Wetland and Tonquin Scablands from adverse impacts of adjacent development.

POLICY 4.3.5 Encourage industrial firms to use co-generation as a means to utilize waste heat from industrial processes and consider solar access when designing industrial facilities.

POLICY 4.3.6 Protect wooded and other natural areas by requiring their preservation in a natural state or by integrating the major trees into the design of the parking lots, buildings, Goals & Policies or more formal landscaping areas of an industrial development. If it is necessary to remove a portion or all of the trees, require mitigation.

POLICY 4.3.7 Administer specific and enforceable architectural and landscape design standards for industrial development.

POLICY 4.3.8 Provide truck routes for industrial traffic that provide for efficient movement of goods while protecting the quality of residential areas.

GOAL 4.4: Identify redevelopment opportunities.

POLICY 4.4.1 Support and encourage redevelopment of mixed-use development.

Strategic Actions

- Evaluate zoning districts within Tualatin for redevelopment for housing and employment uses.
- Evaluate revisions to the Tualatin Town Center Plan to focus on opportunities to support redevelopment.
- Evaluate revisions to the Tualatin Development Code to encourage redevelopment and intensification of uses in commercial and industrial areas.

Planning District Objectives

This section describes the purpose of each planning district.

INDUSTRIAL PLANNING DISTRICTS:

[...]

Basalt Creek Employment District (BCE)

The purpose of this district is to implement the goals of the Basalt Creek Concept Plan, to provide an environment conducive to the development and protection of employment uses that contribute to the local economy and support nearby residential uses. Such permitted uses must not cause objectionable noise, smoke, odor, dust, noxious gases, vibration, glare, heat, fire hazard or other wastes emanating from the property to protect public health, safety and general welfare. The emphasis of the zone is on providing a variety of manufacturing, office, and incubator space for established and emerging businesses, typically in a flex-space development pattern. Commercial uses are allowed but limited in intensity to maintain adequate employment development opportunities.

TITLE 9-10 - MOBILE FOOD UNIT REGULATIONS

TMC 9-10-010 - Purpose and Applicability.

- (1) The purpose of this Chapter is to permit mobile food units to operate on private property within the City and establish regulations to protect the health, safety, and welfare of the public.
- (2) The requirements of this Chapter do not apply to a mobile food unit that operates:
 - (a) As a vendor under an approved City event permit;
 - (b) Under a street closure permit granted by the City;
 - (c) On private property authorized by a Special Event Permit issued under TMC 5-5;
 - (d) On private property authorized by a Special Assembly permit issued under TMC 6-2;
 - (e) Under the authority of any other permit issued by the City where the City indicates approval of a mobile food unit;
 - (f) At private catering events where the sale or distribution of food is not open to the public; or
 - (g) A mobile food unit development.

[...]

TMC 9-10-050 - Location Standards.

- (1) Mobile food units are allowed to operate in the following planning districts:
 - (a) CO—Commercial Office—except a mobile food unit cannot operate in the CO planning district if the location of the mobile food unit is within 200 feet of the Central Commercial (CC) planning district;
 - (b) CR—Recreational Commercial;
 - (c) CG—General Commercial—that portion of the General Commercial Zone that abuts Highway 99W (Pacific Highway);
 - (d) MC—Medical Center;
 - (e) ML—Light Manufacturing;
 - (f) MG—General Manufacturing;
 - (g) MP—Manufacturing Park;
 - (h) MBP—Manufacturing Business Park;
 - (i) IN—Institutional; and
 - (j) BCE—Basalt Creek Employment.

TDC 31.060. - Definitions.

[...]

Mobile Food Unit. A vehicle that is self-propelled or that can be pulled or pushed down a sidewalk, street, highway, or water on which food is prepared, processed, or converted, or which is used in selling and dispensing food to the public. Mobile Food Units include, but are not limited to, food trucks, and food carts.

[...]

**TDC 38.240. - Signs Permitted in the Light Manufacturing (ML), General Manufacturing (MG),
~~and~~ Manufacturing Park (MP), and Basalt Creek Employment (BCE) Planning Districts.**

- (1) No sign must be permitted in the ML, MG, ~~or~~ MP, or BCE Planning Districts for permitted and conditional uses except the following:
- (a) *Monument signs are permitted.* If used, the following standards apply:
- (i) Location on Site: No greater than 100 feet from the frontage property line along the public street right-of-way.
 - (ii) Number: One per frontage on a public street right-of-way with a maximum of two and no more than one on each frontage.
 - (iii) Number of Sides: No more than two.
 - (iv) Height Above Grade: No higher than ten feet.
 - (v) Area: No more than 40 square feet.
 - (vi) Illumination: Indirect or internal.
 - (vii) For schools for kindergarten through 12 in a ML Planning District, one sign may be an internally illuminated mechanical readerboard provided it is on the frontage of an arterial or collector street designated in the City's Transportation System Plan and Map 8-1 of the Comprehensive Plan and the readerboard portion is no more than 75 percent of the allowed sign face area.
- (b) *Wall signs are permitted.* If used, the following standards apply:
- (i) Number: One on each owned or leased wall not to exceed two walls for each owned or leased space and not to exceed four elevations of each building.
 - (ii) Number of Sides: No more than one.
 - (iii) Height Above Grade: No higher than the height of the sign band.
 - (iv) Height of Each Letter, Number, Symbol or Logo: No higher than four feet.
 - (v) Area: No more than five percent of the wall's elevation provided that an area of at least 32 square feet is permitted and the maximum is 150 square feet.
 - (vi) Illumination: Indirect or internal.
 - (vii) In the MP District in place of one wall sign, one monument sign, in addition to the monument signs allowed in (a) above, is allowed, provided it is in the yard setback area abutting the wall where the wall sign would have been located, is within 100 feet of a primary public customer doorway in the wall where the wall sign would have been located and is at least 100 feet from any other monument sign.

(2) See TDC 38.110(5-17) for additional signage and if used, the standards of TDC 38.110(5-17) apply.

COMMERCIAL USE CATEGORIES

[...]

TDC 39.115 - Use Definitions.

The following words and phrases mean:

Advanced Manufacturing: The innovation of improved methods for manufacturing existing products, and the production of new products enabled by advanced technologies.

[...]

TDC 39.326 - Mobile Food Unit Development.

(1) Characteristics. A site under common ownership containing two or more mobile food units which are sited for more than 24 hours at one time.

(2) Examples of Uses.

- Food cart pod with/ or without beverage service.

(3) Exceptions.

- Mobile food units authorized by a Special Event Permit (as issued under TMC 5-5) or Special Assembly Permit (as issued under TMC 6-2).
- Food service that is accessory to another use, (e.g., hotel, major entertainment venue), is regulated as part of the primary use.
- Catering or food preparation without on-site consumption is classified as Retail Sales and Services.

TDC 62.300. - Development Standards.

Development standards in the MP zone are listed in Table 62-2. Additional standards may apply to some uses and situations, see TDC 62.310.

**Table 62-2
Development Standards in the MP Zone**

STANDARD	REQUIREMENT	LIMITATIONS AND CODE REFERENCES
LOT SIZE		
Minimum Lot Size North of SW Leveton Drive	40 acres	<p>Minimum lot size and dimensions for conditional uses are set by City Council to accommodate the proposed use.</p> <p>Lots or remnant areas created by the location of public streets may be less than 40 acres if necessary to create a logical, safe network of streets in the district.</p>
Minimum Lot Size South of SW Leveton Drive, and South on Tonquin Loop Road	5 acres	
LOT DIMENSIONS		
Minimum Lot Width	250 feet	<p>Measured at the building line.</p> <p>When lot has frontage on public street, minimum lot width at the street is 250 feet.</p> <p>When lot has frontage on cul-de-sac street, minimum lot width at the street is 50 feet.</p>
Infrastructure and Utilities Uses	—	As determined through the Subdivision, Partition, or Lot Line Adjustment process
Flag Lots	—	Must be sufficient to comply with minimum access requirements of TDC 73C .

- THE DEVELOPMENT CODE OF THE CITY OF TUALATIN, OREGON
CHAPTER 62 MANUFACTURING PARK ZONE (MP)

STANDARD	REQUIREMENT	LIMITATIONS AND CODE REFERENCES
MINIMUM SETBACKS		
Minimum Building Setback for Yards Adjacent to Streets or Alleys, North of SW Leveton Drive	100 feet	
Minimum Building Setback for Yards Adjacent to Streets or Alleys, south of SW Leveton Drive	60 feet	
Minimum Building Setback for Yards Adjacent to Residential District, south of Tonquin Loop Road	60 feet	

[...]

TDC 65.100. Purpose.

The purpose of this district is to implement the goals of the Basalt Creek Concept Plan, to provide an environment conducive to the development and protection of employment uses that contribute to the local economy and support nearby residential uses. Such permitted uses must not cause objectionable noise, smoke, odor, dust, noxious gases, vibration, glare, heat, fire hazard or other wastes emanating from the property to protect public health, safety and general welfare. The emphasis of the zone is on providing a variety of manufacturing, office, and incubator space for established and emerging businesses, typically in a flex-space development pattern. Commercial uses are allowed but limited in intensity to maintain adequate employment development opportunities.

TDC 65.200. Use Categories.

(1) Use Categories. Table 65-1 lists use categories Permitted Outright (P) or Conditionally Permitted (C) in the BCE zone. Use categories may also be designated as Limited (L) and subject to the limitations listed in Table 65-1 and restrictions identified in TDC 65.210. Limitations may restrict the specific type of use, location, size, or other characteristics of the use category. Use categories which are not listed are prohibited within the zone, except for uses which are found by the City Manager or appointee to be of a similar character and to meet the purpose of this zone, as provided in TDC 31.070.

Table 65-1
Use Categories in the BCE Zone

<u>USE CATEGORY</u>	<u>STATUS</u>	<u>LIMITATIONS AND CODE REFERENCES</u>
<u>RESIDENTIAL USE CATEGORIES</u>		
<u>Household Living</u>	<u>C (L)</u>	<u>Conditional uses limited to a caretaker residence when necessary for security purposes.</u>
<u>COMMERCIAL USE CATEGORIES</u>		
<u>Commercial Recreation</u>	<u>P (L)</u>	<u>Permitted uses limited to a health or fitness facility subject to TDC 65.210(1).</u>
<u>Eating and Drinking Establishments</u>	<u>P (L)</u>	<u>Permitted uses limited to eating and drinking establishments without drive-up or drive-through facilities subject to TDC 65.210(1).</u>
<u>Mobile Food Unit Development</u>	<u>P (L)</u>	<u>Permitted uses limited subject to TDC 65.120(2).</u>
<u>Medical Office</u>	<u>P (L)</u>	<u>Permitted uses limited subject to TDC 65.120(1).</u>
<u>Office</u>	<u>P (L)</u>	<u>Permitted uses limited subject to TDC 65.210(3).</u>

- THE DEVELOPMENT CODE OF THE CITY OF TUALATIN, OREGON
CHAPTER 65 BASALT CREEK EMPLOYMENT ZONE (BCE)

<u>Other Educational and Vocational Services</u>	<u>P (L)</u>	<u>Permitted uses limited to:</u> <ul style="list-style-type: none"> • <u>Correspondence, trade, or vocational schools; and</u> • <u>Job training or related services subject to TDC 65.210(1).</u>
<u>Retail Sales and Services</u>	<u>P (L)</u>	<u>Permitted uses limited to:</u> <ul style="list-style-type: none"> • <u>Child day care center permitted subject to TDC 34.200.</u> • <u>Retail Sales and Services uses without drive-up or drive-through facilities subject to TDC 65.210(1) and (4).</u>
INDUSTRIAL USE CATEGORIES		
<u>Heavy Manufacturing</u>	<u>P (L)</u>	<u>Permitted uses limited to:</u> <ul style="list-style-type: none"> • <u>Casting or fabrication of metals, including electroplating;</u> • <u>Manufacture, assembly, processing, or packaging of the following types of products: batteries; bicycles; boilers; bottles; brick, tile or terra cotta; cans; chainsaws; dryers; electric generators; electric motors; electric transformers; engines, larger gasoline or diesel; freezers; heating and cooling equipment; ladders; lawnmowers; manufactured dwellings; marine pleasure craft; motor vehicles; paint; prefabricated building or structural members for buildings; sashes and doors; signs and display structures; refrigerators; rototillers; vending machines; washing machines; and windows;</u> <u>Other similar advanced manufacturing uses as determined by application of TDC 31.070.</u>
<u>Light Manufacturing</u>	<u>P/C (L)</u>	<u>Conditional uses limited to trade and industrial school or training center. Truck driving schools are prohibited.</u> <u>All other uses Permitted outright except: Building, heating, plumbing and electrical</u>

- THE DEVELOPMENT CODE OF THE CITY OF TUALATIN, OREGON
CHAPTER 65 BASALT CREEK EMPLOYMENT ZONE (BCE)

		<u>contractor's offices, with on-site storage of equipment or materials are prohibited.</u>
<u>Warehouse and Freight Movement</u>	<u>P/C (L)</u>	<u>Permitted and Conditional uses limited subject to TDC 65.210(5).</u>
<u>Wholesale Sales</u>	<u>P (L)</u>	<u>Permitted uses limited to:</u> <ul style="list-style-type: none"> • <u>Sales of industrial products primarily sold wholesale to other industrial firms or industrial workers, subject to TDC 65.210(6).</u>
INFRASTRUCTURE AND UTILITIES USE CATEGORIES		
<u>Basic Utilities</u>	<u>P</u>	<u>—</u>
<u>Greenways and Natural Areas</u>	<u>P</u>	<u>—</u>
<u>Public Safety Facilities</u>	<u>C (L)</u>	<u>Conditional uses limited to a fire station.</u>
<u>Transportation Facilities</u>	<u>P</u>	<u>—</u>
<u>Wireless Communication Facility</u>	<u>P (L)</u>	<u>Subject to maximum height and minimum setback standards defined by TDC Chapter 73F.</u>

TDC 65.210. Additional Limitations on Uses.

- (1) Commercial Recreation, Eating and Drinking Establishments, Medical Office, Vocational Services, and/or Retail Sales and Services. Except for Child Day Care Centers, permitted uses in these categories, as specified in Table 65-1, are subject to the following additional standards.
 - (a) Maximum Size. The use must not exceed 5,000 square feet for any individual use or a total of 20,000 square feet of uses on the site.
 - (b) Location Standard. The use or uses must be located on a lot, parcel or development site that has at least 150 feet of frontage on SW Graham's Ferry Road.
- (2) Mobile Food Unit Development. A mobile food unit development is a permitted use as specified below.
 - (a) Maximum Size. A mobile food unit development may contain up to ten mobile food units. Each mobile food unit must not exceed 200 square feet. The combination of mobile food units and additional structures accessory to or in support of the development must not exceed 20,000 square feet.
 - (b) Location Standard. One single mobile food unit development within the BCE district is allowed and must be located on a lot, parcel or development site that has at least 150 feet of frontage on SW Graham's Ferry Road.

- (c) Outdoor Storage. All operations must be conducted within a structure or within an area that is screened from public view.
- (d) Architectural Review Required. A mobile food unit development is subject to Architectural Review and Approval under TDC 33. Compliance with associated development standards is required.
- (3) Offices. Offices are a permitted use as specified below.
- (a) Use as Accessory to an Industrial Use. Office uses accessory to a permitted light and/or heavy manufacturing use are permitted.
- (b) Limited Uses. A primary office use must not exceed 20,000 square feet on the site.
- (4) Sale of Goods Produced On-Site. The retail sale of goods produced on-site is permitted, provided that the retail sale area does not exceed 5,000 square feet.
- (5) Warehouse and Freight Movement. Warehouse and freight movement is allowed as specified below.
- (a) Limited Use as Accessory to a Manufacturing Use. The use must be conducted wholly in conjunction with a permitted light and/or heavy manufacturing use on the same lot, parcel, or development site, and facilitate the storage and distribution of goods produced on-site.
- (i) Maximum Size. The use must not exceed more than 50% of the gross floor area of the permitted light and/or heavy manufacturing use. A Conditional Use Permit is required for uses greater than 50% and up to 200% of the gross floor area of the permitted light and/or heavy manufacturing use.
- (b) Other Limited Uses. A primary warehouse and freight movement use may be permitted on a site that includes a light and/or heavy manufacturing use comprising a minimum of 30% of the total building square footage on the site. No single building may exceed 150,000 square feet in size.
- (6) Wholesale Sales. Wholesale sales is a permitted use as specified below.
- (a) Limited Uses. A primary wholesale sales use is limited to the sales of industrial products primarily sold wholesale to other industrial firms or industrial workers may be permitted on a site that includes a light and/or heavy manufacturing use comprising a minimum of 30% of the total building square footage on the site. No single building may exceed 150,000 square feet in size.
- (7) Outdoor Uses. All uses must be conducted wholly within a completely enclosed building, except off-street parking and loading, Basic Utilities, Wireless Communication Facilities or as otherwise provided by this section.

TDC 65.300. Development Standards.

Development standards in the BCE zone are listed in Table 65-2. Additional standards may apply to some uses and situations, see TDC 65.310.

Table 65-2
Development Standards in the BCE Zone

<u>STANDARD</u>	<u>REQUIREMENT</u>	<u>LIMITATIONS AND CODE REFERENCES</u>
<u>LOT SIZE</u>		
<u>Minimum Lot Size</u>	<u>2 acres</u>	
<u>Minimum Lot Size for Standalone Commercial Uses</u>	<u>10,000 square feet</u>	
<u>LOT DIMENSIONS</u>		
<u>Flag Lots</u>	<u>=</u>	<u>Must be sufficient to comply with minimum access requirements of TDC 73C.</u>
<u>MINIMUM SETBACKS</u>		
<u>Minimum Building Setback for Yards Adjacent to Streets or Alleys</u>	<u>30 feet</u>	
<u>Minimum Building Setback for Yards Adjacent to Streets or Alleys for Commercial Uses</u>	<u>10 feet</u>	
<u>Minimum Building Setback for Yards Adjacent to Residential District</u>	<u>30 feet</u>	
<u>Minimum Setback for Side and Rear Yards not Adjacent to Streets or Alleys</u>	<u>10 feet</u>	<u>No minimum setback if adjacent to railroad right-of-way or spur track.</u>
<u>Parking and Circulation Areas Adjacent to Public Right-of-Way</u>	<u>20 feet</u>	<u>No minimum setback required adjacent to joint access approach in accordance with TDC 73C.</u>
<u>Parking and Circulation Areas Adjacent to Private Property Line</u>	<u>10 feet</u>	<u>No minimum setback required adjacent to joint access approach in accordance with TDC 73C.</u>
<u>Fences Adjacent to Public Right-of-Way</u>	<u>10 feet</u>	
<u>STRUCTURE HEIGHT</u>		

<u>Maximum Height</u>	<u>45 feet</u>	<u>For any structure within 100 feet of a residential zone (measured from property line or centerline of public right of way, if separated by a street) that entire structure must be limited to the maximum height of that residential zone.</u>
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TDC 65.310. Additional Development Standards.

- (1) Spur Rail Tracks. Spur rail tracks are not permitted within 200 feet of an adjacent residential district.
- (2) Wetland Conservation Lots. Minimum lot size, width, or frontage requirement do not apply to wetland conservation lots.
- (3) Landscape Buffer Adjacent to Residential Uses. A landscaped area, meeting the Type D standard described in Table 73B-4, must be located along property lines abutting residential zones.
- (4) Fences Adjacent to Public Right-of-Way. Decorative fencing is encouraged. Open fencing (such as chain-link or slatted chain-link fencing) must be screened from public-right-of-way by a minimum 10-foot-wide landscape area that is planted with a hedge of narrow or broad leaf evergreen shrubs and which will form a four-foot high continuous screen within two years of planting.
- (5) Sound Barrier Construction. Sound barrier construction is required to mitigate the impact of noise associated with overhead doors and building mechanical equipment, including but not limited to heating, cooling, and ventilation equipment, compressors, waste evacuation systems, electrical transformers, and other motorized or powered machinery located on the exterior of a building. Sound barrier construction must conform to the following standards:
 - (a) Applicability. New construction, including additions or changes to existing facilities, must comply with the provisions of this section, as determined by the Architectural Review process. Where buildings or outdoor areas located on more than one parcel are all part of a single use as determined by the Architectural Review process, all of the parcels may be required to comply with the provisions of this section.
 - (b) Distance from Residential Use. Sound barriers must be used to intercept all straight-line lateral (direct line between two points) paths of 450 feet or less between a property within a residential planning district and:
 - (i) Any side edge of an overhead door or other doorway larger than 64 square feet, at a minimum height of eight feet above the floor elevation of the doorway; or

(ii) Any building mechanical device at a minimum height equal to the height of the mechanical object to be screened.

(c) Exemption for Existing Structures. Where existing structures (on or off site) are located such that they will reflect sound away from residential areas and will function as a sound barrier, on-site sound barrier construction must not be required, except that at the time such structures are removed, sound barrier construction must be required.

(d) Design. Sound barriers must consist of masonry walls or earth berms located so as to reflect sound away from, rather than toward, noise sensitive properties. This may include masonry wing walls attached to a building, detached masonry walls (such as the perimeter of the site), earth berms, or combinations of the three. Wing walls must be at least as tall as the tallest overhead door they are designed to screen where they meet the building. The height of the wall may be reduced along a maximum incline formed by a horizontal distance twice the vertical change in height, or 26.5 degrees from horizontal.

INDUSTRIAL DESIGN STANDARDS

TDC 73A.500. - Industrial Design Standards.

The following standards are minimum requirements for industrial development in all zones, except for the Basalt Creek Employment (BCE) zone, which has its own standards:

[...]

- (6) *Adjacent to Transit.* Industrial development adjacent to transit must comply with the following:
 - (a) Development on a transit street ~~designated~~ illustrated on TDC Chapter 11 Comprehensive Plan Map 8-5 (Figure 11) must provide either a transit stop pad on-site, or an on-site or public sidewalk connection to a transit stop along the subject property's frontage on the transit street; and
 - (b) Development abutting major transit stops as ~~designated in~~ illustrated on TDC Chapter 11 Comprehensive Plan Map 8-5 (Figure 11) must:
 - (i) Locate any portion of a building within 20 feet of the major transit stop or provide a pedestrian plaza at the transit stop;
 - (ii) Provide a reasonably direct pedestrian connection between the major transit stop and a building entrance on the site;
 - (iii) Provide a transit passenger landing pad accessible to disabled persons;
 - (iv) Provide an easement or dedication for a passenger shelter as determined by the City; and
 - (v) Provide lighting at the major transit stop.

TDC 73A.600 – Basalt Creek Employment (BCE) Design Standards.

- (1) *Applicability.* The Basalt Creek Employment (BCE) design standards apply to:
 - (a) New buildings in the Basalt Creek Employment (BCE) zone.
 - (b) Expansion or substantial exterior remodeling of existing non-residential development in the Basalt Creek Employment (BCE) zone which is greater than 50 percent of the building's gross floor area or alters any facade which abuts a public or private street frontage or property within a residential planning district by more than 50 percent.
- (2) *Exceptions:* The City Manager may allow exceptions to these standards without the need to obtain a formal variance pursuant to Chapter 33.120 provided at least one of the following circumstance is met:
 - (a) The applicant demonstrates that the physical characteristics of the site or existing structure make compliance impractical (e.g., they include, but are not limited to,

steep slopes, wetlands, other bodies of water, trees or other natural features of the site, buildings or other existing development, utility lines and easements, etc.); or

(b) The applicant demonstrates that the alternative design is exceptional in the quality of detailing, appearance or materials and/or creates a positive unique relationship to other structures, views or open space in a manner that accomplishes the purpose of this section

(3) *Building Design Standards.* BCE zone development must provide building design as follows:

(a) *Building Composition.* New buildings shall use massing characteristics and asymmetrical composition to avoid the monolithic expanse of frontages and roof lines and break up building sections using elements including variable planes, projections, bays, setbacks, canopies, awnings, and parapets, changes in the roof line, materials, color, or textures.

(b) *Primary Facades.* All facades that abut the public right of way and/ or a residential zone must be architecturally significant and give the appearance of high quality design. Exterior buildings materials must have a durability equivalent to that expected of contemporary office, flex and industrial buildings. Appropriate materials include, but are not limited to: masonry (e.g., brick or architectural block); glass; synthetic plaster; pre-cast concrete; or, stone.

(c) *Secondary Facades.* All facades that do not abut the public right of way and/ or a residential zone may include exterior building materials of lesser durability or appearance. Materials considered of lesser durability or appearance include, but are not limited to: metal panels/sheet metal, fiberglass panels, vinyl or aluminum siding, or wood shingles.

(d) *Exterior Colors.* The dominant exterior must have earth-tone shades, such as gray, tan, brown, rust, green, red, etc. The contrast between trim or mortar and the dominant exterior finish should be moderate.

(e) *Upper Floor Appearance.* When buildings have two or more stories, the material used at the ground level must differ from that used at upper levels in order to create a clear distinction between the ground and upper levels. For buildings in excess of 12 feet in height, each whole increment of 12 feet shall be considered a story for the purposes of this provision.

(f) *Stepback.* Buildings greater than three (3) stories must be stepped back, resulting in no more than three (3) stories of façade being on the same vertical plan. Generally, the fourth (4th) story must be stepped back; however, the required stepback may occur at the third (3rd) floor if the developer prefers. For buildings in excess of 12 feet in height, each whole increment of 12 feet shall be considered with a single story that is more than 12 feet above grade at any point, every twelve feet shall be considered a story for the purposes of this provision. Required stepbacks must be a minimum of twelve (12) feet.

(g) Enclosure or Screening of Mechanical Equipment. Roof mounted mechanical equipment on flat roofed structures must be screened by parapet walls to the maximum degree possible. Site located mechanical equipment must be installed in below grade vaults where possible or screened by a site obscuring fence or landscaping. Other building mounted mechanical equipment must be screened from view to the maximum degree possible.

(4) Walkways. BCE zone development must provide walkways as follows:

- (a) Walkways must be a minimum of five feet in width;
- (b) Walkways must be constructed of asphalt, concrete, pervious concrete, pavers, or grasscrete. Gravel or bark chips are not acceptable;
- (c) Walkways must meet ADA standards applicable at time of construction or alteration;
- (d) Walkways must be provided between the main building entrances and other on-site buildings, accessways, and sidewalks along the public right-of-way;
- (e) Walkways through parking areas, drive aisles, and loading areas must be of a different appearance than the adjacent paved vehicular areas; and
- (f) Outdoor Recreation Access Routes must be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

(5) Accessways.

(a) When Required. Accessways are required to be constructed when a BCE development is adjacent to any of the following:

- (i) Residential property;
- (ii) Commercial property;
- (iii) Areas intended for public use, such as schools and parks; and
- (iv) Collector or arterial streets where transit stops or bike lanes are provided or designated.

(b) Design Standard. Accessways must meet the following design standards:

- (i) Accessways must be a minimum of eight feet in width;
- (ii) Public accessways must be constructed in accordance with the Public Works Construction Code;
- (iii) Private accessways must be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material;
- (iv) Accessways must meet ADA standards applicable at time of construction or alteration;

- (v) Accessways must be provided as a connection between the development's walkway and bikeway circulation system;
- (vi) Accessways may be gated for security purposes;
- (vii) Outdoor Recreation Access Routes must be provided between the development's walkway and bikeway circulation system and parks, bikeways, and greenways where a bike or pedestrian path is designated; and
- (viii) Must be constructed, owned and maintained by the property owner.
- (c) Exceptions. The Accessway standard does not apply to the following:

 - (i) Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland; and
 - (ii) Accessways to undeveloped parcels or undeveloped transit facilities need not be constructed at the time the subject property is developed. In such cases the applicant for development must enter into a written agreement with the City guaranteeing future performance by the applicant and any successors in interest of the property being developed to construct an accessway when the adjacent undeveloped parcel is developed. The agreement recorded is subject to the City's review and approval.
- (6) Safety and Security. BCE development must provide safety and security features as follows:

 - (a) Locate windows and provide lighting in a manner that enables tenants, employees, and police to watch over pedestrian, parking, and loading areas;
 - (b) Locate windows and interior lighting to enable surveillance of interior activity from the public right-of-way;
 - (c) Locate, orient, and select exterior lighting to facilitate surveillance of on-site activities from the public right-of-way without shining into public rights-of-way or fish and wildlife habitat areas;
 - (d) Provide an identification system which clearly locates buildings and their entries for patrons and emergency services; and
 - (e) Above ground sewer or water pumping stations, pressure reading stations, water reservoirs, electrical substations, and above ground natural gas pumping stations must provide a minimum six foot tall security fence or wall.
- (7) Adjacent to Transit. BCE development adjacent to transit must comply with the following:

 - (a) Development on a transit street illustrated on Comprehensive Plan Map 8-5 must provide either a transit stop pad on-site, or an on-site or public sidewalk connection to a transit stop along the subject property's frontage on the transit street; and

(b) Development abutting major transit stops as illustrated on Comprehensive Plan Map 8-5 must:

- (i) Locate any portion of a building within 20 feet of the major transit stop or provide a pedestrian plaza at the transit stop;
- (ii) Provide a reasonably direct pedestrian connection between the major transit stop and a building entrance on the site;
- (iii) Provide a transit passenger landing pad accessible to disabled persons;
- (iv) Provide an easement or dedication for a passenger shelter as determined by the City; and
- (v) Provide lighting at the major transit stop.

INSTITUTIONAL DESIGN STANDARDS

TDC 73A.6700. - Institutional Design Standards.

The following standards are minimum requirements for institutional development in all zones:

[...]

TDC 73B.020. - Landscape Area Standards Minimum Areas by Use and Zone.

The following are the minimum areas required to be landscaped for each use and zone:

Table 73B-1
Required Minimum Landscape Area

Zone	Minimum Area Requirement*	Minimum Area Requirement with dedication for a fish and wildlife habitat*
(1) RL, RML, RMH, RH and RH/HR zones— Permitted Uses	None	None
(2) RL, RML, RMH, RH and RH/HR zones— Conditional Uses, except Small Lot Subdivisions	25 percent of the total area to be developed	20 percent of the total area to be developed
(3) CO, CR, CC, CG, ML, and MG zones except within the Core Area Parking District—All uses	15 percent of the total area to be developed	12.5 percent of the total area to be developed
(4) CO, CR, CC, CG, MUC, ML, and MG zones within the Core Area Parking District—All uses	10 percent of the total area to be developed	7.5 percent of the total area to be developed
(5) IN, CN, CO/MR, MC, and MP zones—All uses	25 percent of the total area to be developed	22.5 percent of the total area to be developed
(6) <u>BCE zone—All uses</u> ; Industrial Business Park Overlay District and MBP—must be approved through Industrial Master Plans	20 percent of the total area to be developed	Not applicable
* For properties within the Hedges Creek Wetland Protection District which have signed the "Wetlands Mitigation Agreement," the improved or unimproved wetland buffer area may reduce the required landscaping to 12.5 percent as long as all other landscape requirements are met.		

[...]

TDC 73B.050 - Additional Minimum Landscaping Requirements for all uses in the Mixed Use Commercial Zone.

- (1) *General.* In addition to requirements in TDC 73B.020, all uses within the Mixed-Use Commercial (MUC) zone, must comply with the following:
 - (a) All areas not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas, or undisturbed natural areas must be landscaped:

- (i) This standard does not apply to areas subject to the Hedges Creek Wetlands Mitigation Agreement.
 - (b) A landscape area may be occupied by utilities, screening, sidewalks, bikeways; and
 - (c) Landscape screening provisions are superseded by the vision clearance requirements of Figure 73B-~~24~~.
- (2) *Standards.* The matrices in Tables 73B-~~13~~ and 73B-~~24~~ must be used in calculating widths of landscape buffer areas, as well as screening improvements to be installed between proposed uses and abutting uses. Landscape buffers are not required between abutting uses that are of a different type when the uses are separated by a street.
- (a) *Buffer.* The minimum improvements within a buffer area must include landscaping and screening specified in Tables 73B-~~13~~ and 73B-~~24~~. Landscape improvements must meet the following specifications:
 - (i) At least one row of trees must be planted. Deciduous trees must be a minimum of two-inch caliper at four feet in height and evergreen trees must be a minimum height of five feet high at the time of planting. Spacing for trees must be as follows:
 - (A) Small or narrow-stature trees, under 25 feet tall or less than 16 feet wide at maturity must be spaced not more than 15 feet apart;
 - (B) Medium-sized trees between 25 feet to 40 feet tall and with 16 feet to 35 feet wide branching at maturity must be spaced not more than 30 feet apart;
 - (C) Large trees, over 40 feet tall and with more than 35 feet wide branching at maturity, must be spaced not more than 30 feet apart.
 - (ii) At least ten five-gallon shrubs or 20 one-gallon shrubs must be planted for each 1,000 square feet of required buffer area;
 - (iii) The remaining area must be planted in lawn or other living ground cover.
 - (b) *Screening.* Where screening is specified in Tables 73B-~~13~~ and 73B-~~24~~, the following standards apply, in addition to those required for buffering:
 - (i) The prescribed heights of required screening must be measured from the actual adjoining level of finished grade, except that where parking, loading, storage or similar areas are located above finished grade, the height of fences, walls or landscaping required to screen such areas or space must be measured from the level of such improvements. When the use to be screened is located downhill from the adjoining use, the prescribed heights of required fences, walls, or landscape screening must be measured from the actual grade of the adjoining property. In this case, fences and walls may exceed the permitted six foot height at the discretion of the City Manager, as a condition of approval. When steep grades

make the installation of walls, fences, or landscaping to the required height impractical, a detailed landscape/screening plan must be submitted for approval;

- (ii) A hedge of narrow or broad leaf evergreen shrubs must be planted which will form a four-foot high continuous screen within two years of planting; or
- (iii) An earthen berm planted with narrow or broad leaf evergreen shrubs must be provided which will form a continuous screen of the height specified in Table 73B-~~24~~ within two years. The unplanted portion of the berm must be planted in lawn or other living ground cover: or
- (iv) A fence or wall of the height specified in Table 73B-~~24~~ must be constructed of materials commonly used in the construction of fences and walls such as wood, stone, rock or brick, or as determined in the Architectural Review process and provide a continuous sight obscuring screen.
 - (A) Walls must be a minimum of six inches thick.
 - (B) Fence or wall height may not exceed three feet in height in a required front yard or six feet in height in required front yards adjacent to designated arterial or collector streets.
 - (C) An evergreen hedge or other dense evergreen landscaping may satisfy a requirement for a sight-obscuring fence where required.
 - (D) An earthen berm and fence or wall combination must not exceed six-feet in height.

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**Table 73B-1
Required Landscape Buffer Between Uses**

		Proposed Improvement				
		Residential	Commercial	Institutional	Parking Lots 4—50 spaces	Parking Lots 50+ spaces
Abutting	Residential	—	D	D	E	D
	Commercial	E	—	D	—	—
	Industrial	D	A	D	—	—
	Parking Lots	E	—	—	—	—
	Arterial Streets	A	—	A	—	—

**Table 73B-2
Required Landscaping and Screening**

	Options	Width (feet)	Trees (per linear feet of buffer)	Shrubs or Groundcover	Screening
A	—	10	—	Lawn/living groundcover	—
B	—	10	20 feet min/30 feet max spacing	Lawn/living groundcover	—
C	1	10	15 feet min/30 feet max spacing	Shrubs	4 feet hedges
	2	8		Shrubs	5 feet fence
	3	6		Shrubs	6 feet wall
D	1	20	10 feet min/20 feet max spacing	Shrubs	6 feet hedge
	2	15		Shrubs	6 feet fence
	3	10		Shrubs	6 feet wall

[...]

TDC 73B.080. - Minimum Landscaping Standards for All Zones.

The following are minimum standards for landscaping for all zones.

Table 73B-2
Minimum Landscape Standards

(1) Required Landscape Areas	<ul style="list-style-type: none"> • Must be designed, constructed, installed, and maintained so that within three years the ground must be covered by living grass or other plant materials. • The foliage crown of trees cannot be used to meet this requirement. • A maximum of ten percent of the landscaped area may be covered with un-vegetated areas of bark chips, rock or stone. • Must be installed in accordance with the provisions of the American National Standards Institute ANSI A300 (Part 1) (Latest Edition). • Must be controlled by pruning, trimming, or otherwise so that: • It will not interfere with designated pedestrian or vehicular access; and • It will not constitute a traffic hazard because of reduced visibility.
(2) Fences	<ul style="list-style-type: none"> • Landscape plans that include fences must integrate any fencing into the plan to guide wild animals toward animal crossings under, over, or around transportation corridors.
(3) Tree Preservation	<ul style="list-style-type: none"> • Trees and other plant materials to be retained must be identified on the landscape plan and grading plan. • During construction: • Must provide above and below ground protection for existing trees and plant materials identified to remain; • Trees and plant materials identified for preservation must be protected by chain link or other sturdy fencing placed around the tree at the drip line; • If it is necessary to fence within the drip line, such fencing must be specified by a qualified arborist; • Top soil storage and construction material storage must not be located within the drip line of trees designated to be preserved; • Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip-line area, such grading, paving, trenching, boring, digging, or similar encroachment must only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met; and • Tree root ends must not remain exposed. • Landscaping under preserved trees must be compatible with the retention and health of the preserved tree. • When it is necessary for a preserved tree to be removed in accordance with TDC 33.110 (Tree Removal Permit) the landscaped area surrounding the tree or trees must be maintained and replanted with trees that relate to the present landscape plan, or if there is no landscape plan, then trees that are complementary with existing, landscape materials. Native trees are encouraged

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	<ul style="list-style-type: none"> • 100 percent of the area preserved under any tree or group of trees (Except for impervious surface areas) retained in the landscape plan must apply directly to the percentage of landscaping required for a development
(4) Grading	<ul style="list-style-type: none"> • After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting. • All planting areas must be graded to provide positive drainage. • Soil, water, plant materials, mulch, or other materials must not be allowed to wash across roadways or walkways. • Impervious surface drainage must be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.
(5) Irrigation	<ul style="list-style-type: none"> • Landscaped areas must be irrigated with an automatic underground or drip irrigation system.
(6) Re-vegetation in Un-landscaped Areas	<ul style="list-style-type: none"> • Vegetation must be replanted in all areas where vegetation has been removed or damaged in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements. • Plant materials must be watered at intervals sufficient to ensure survival and growth for a minimum of two growing seasons. • The use of native plant materials is encouraged to reduce irrigation and maintenance demands. • Disturbed soils should be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity.

Table 73B-3
Landscape Buffer Between Uses

<u>Existing/Abutting Districts</u>	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Parking Lots 4—50 spaces</u>	<u>Parking Lots 50+ spaces</u>
<u>Residential</u>	=	D	D	C	D
<u>Commercial</u>	C	=	D	=	=
<u>Industrial</u>	D	A	=	=	=
<u>Parking Lots</u>	C	=	=	=	=
<u>Arterial Streets</u>	A	=	A	=	=

**Table 73B-4
Landscaping and Screening**

	<u>Options</u>	<u>Width (feet)</u>	<u>Trees (per linear feet of buffer)</u>	<u>Shrubs or Groundcover</u>	<u>Screening</u>
A	=	<u>10</u>	=	<u>Lawn/living groundcover</u>	=
B	=	<u>10</u>	<u>20 feet min/30 feet max spacing</u>	<u>Lawn/living groundcover</u>	=
C	<u>1</u>	<u>10</u>	<u>15 feet min/30 feet max spacing</u>	<u>Shrubs</u>	<u>4 feet hedges</u>
	<u>2</u>	<u>8</u>		<u>Shrubs</u>	<u>5 feet fence</u>
	<u>3</u>	<u>6</u>		<u>Shrubs</u>	<u>6 feet wall</u>
D	<u>1</u>	<u>30</u>	<u>10 feet min/30 feet max spacing</u>	<u>Shrubs</u>	<u>Berm</u>
	<u>2</u>	<u>20</u>		<u>Shrubs</u>	<u>6 feet hedge</u>
	<u>3</u>	<u>15</u>		<u>Shrubs</u>	<u>6 feet fence</u>
	<u>4</u>	<u>10</u>		<u>Shrubs</u>	<u>6 feet wall</u>

TDC 73B.090. - Minimum Standards Trees and Plants.

The following minimum standards apply to the types of landscaping required to be installed for all zones.

**Table 73B-5
Minimum Standards for Trees and Plants**

<p>(1) Deciduous Shade Trees</p>	<ul style="list-style-type: none"> • One and on-half inch caliper measured six inches above ground; • Balled and burlapped; bare root trees will be acceptable to plant during their dormant season; • Reach a mature height of 30 feet or more; • Cast moderate to dense shade in summer; • Live over 60 years; • Do well in urban environments, tolerant of pollution and heat, and resistant to drought; • Require little maintenance and mechanically strong; • Insect- and disease-resistant; • Require little pruning; and • Barren of fruit production.
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(2) Deciduous Ornamental Trees	<ul style="list-style-type: none"> • One and on-half inch caliper measured six inches above ground; • Balled and burlapped; bare root trees will be acceptable to plant during their dormant season; and • Healthy, disease-free, damage-free, well-branched stock, characteristic of the species
(3) Coniferous Trees	<ul style="list-style-type: none"> • Five feet in height above ground; • Balled and burlapped; bare root trees will be acceptable to plant during their dormant season; and • Healthy, disease-free, damage-free, well-branched stock, characteristic of the species.
(4) Evergreen and Deciduous Shrubs	<ul style="list-style-type: none"> • One to five gallon size; • Healthy, disease-free, damage-free, well-branched stock, characteristic of the species; and • Side of shrub with best foliage must be oriented to public view.
(5) Groundcovers	<ul style="list-style-type: none"> • Fully rooted; • Well branched or leafed; • Healthy, disease-free, damage-free, well-branched stock, characteristic of the species; and • English ivy (<i>Hedera helix</i>) is prohibited.
(6) Lawns	<ul style="list-style-type: none"> • Consist of grasses, including sod, or seeds of acceptable mix within the local landscape industry; • 100 percent coverage and weed free; and • Healthy, disease-free, damage-free, characteristic of the species.