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I. Introduction

Background

Mixed use is an approach to land use and development that has been steadily evolving in the United States since the 1960's. By the late 1990's, mixed use developments were incorporating many of the features of what has commonly been referred to as "Smart Growth" or the "New Urbanism". These features included greater pedestrian orientation, an interconnected street network, accommodation of all modes of travel, a positive relationship between buildings and streets, more emphasis on building design, and more efficient use of land, to name a few.

In 1997, when the City of Colorado Springs began to rewrite its Comprehensive Plan, citizens and city planners examined alternatives to the prevailing single-use, isolated parcel, automobile-oriented pattern of land use in the city. Mixed use development was an obvious choice. It represented a land use pattern with the potential to reduce reliance on the automobile, create more walkable activity centers, promote better design, support public transit use, improve land use transitions, and broaden housing choices. As this potential took shape in the formulation of City policies for land use, transportation, neighborhoods, community design, and infrastructure, mixed use development emerged as

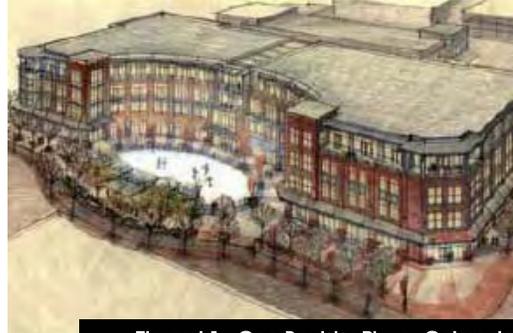


Figure I.1— One Boulder Plaza, Colorado

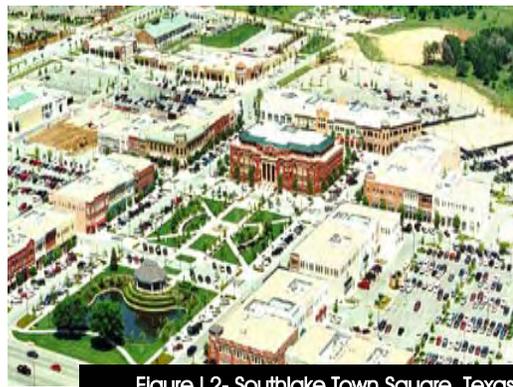


Figure I.2- Southlake Town Square, Texas

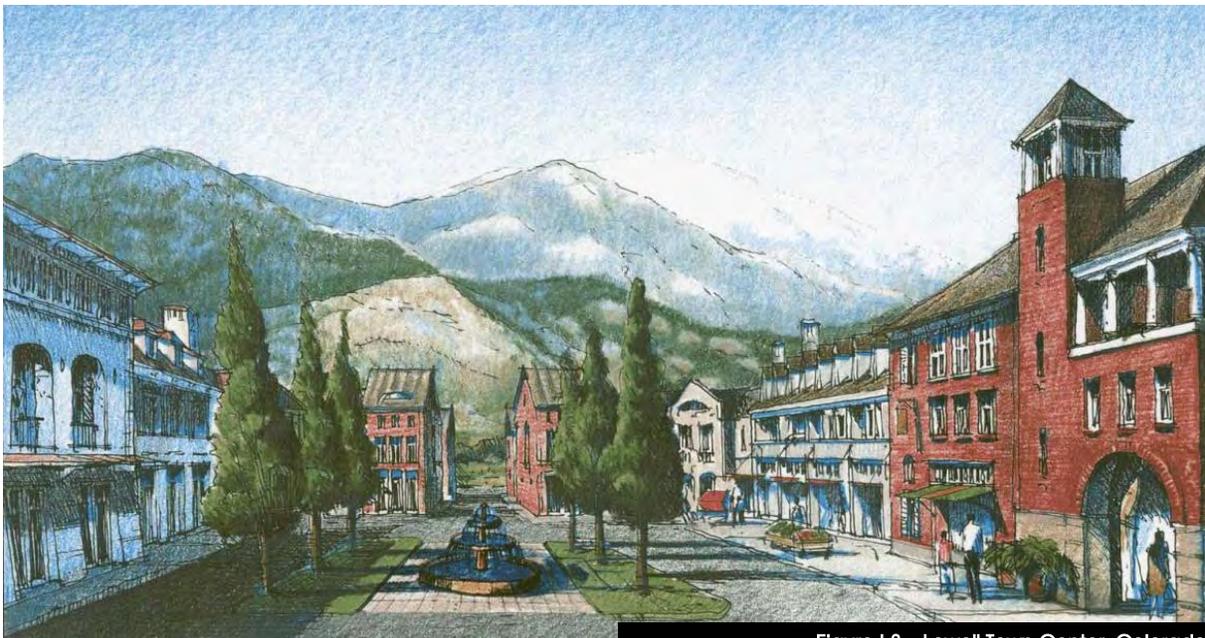


Figure I.3—Lowell Town Center, Colorado

one of the foundations of the City's new 2001 Comprehensive Plan.

The Comprehensive Plan envisions mixed use development taking place in a hierarchy of activity centers that starts at the neighborhood scale, continues on up through commercial centers of varying sizes, and culminates in large employment and regional centers. The Comprehensive Plan also allows for mixed use development in different contexts, including infill and redevelopment sites, partially developed areas, and completely new "greenfield" areas. In all cases, mixed-use development is seen as integrating a variety of commercial and employment uses with residential uses in a way that complements surrounding residential areas. With the exception of neighborhood centers, the potential locations of these mixed use activity centers are mapped on the City's 2020 Land Use Map.

After the completion of the Comprehensive Plan, the top priority for its implementation was identified as the drafting of amendments to the zoning and subdivision regulations that would enable and facilitate mixed use development in the city. This manual, along with the associated amendments to the zoning and subdivision codes, represents the result of that effort.

What is Mixed Use?

The Comprehensive Plan defines mixed use development as "Development that integrates two or more land uses, such as residential, commercial, and office, with a strong pedestrian orientation." To supplement

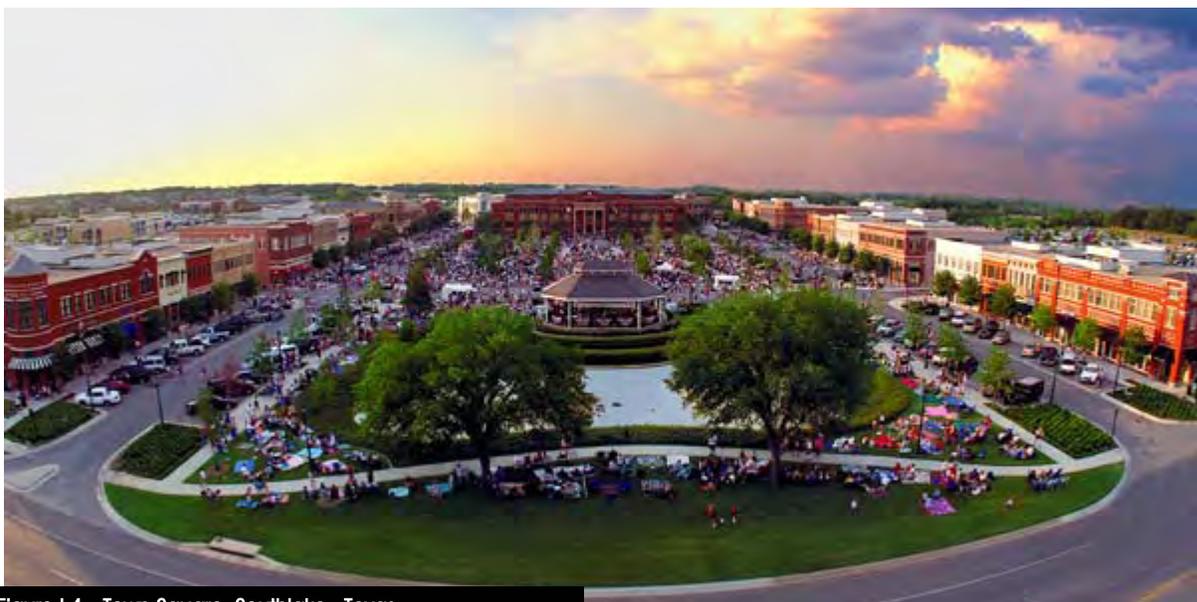


Figure I.4—Town Square, Southlake , Texas

this very simple definition, the policies of the Comprehensive Plan and the standards for the mixed use zones spell out a number of qualities that are essential to mixed use development. They include good pedestrian orientation and connectivity, the accommodation of all modes of travel, the inclusion of residential development in the mix, and the physical and functional integration of uses through careful site layout and the design of buildings and streets. These qualities distinguish mixed use from multi-use developments which may locate different uses in proximity to one another, but which do not provide viable pedestrian connections, or coherent layout and design, and rely primarily on automobiles to get between uses. Mixed use can be developed in a variety of ways, either horizontally in multiple buildings, or vertically in the same building, or through a combination of the two.

Purpose of the Design Manual

The purpose of the *Mixed Use Development Design Manual* is threefold. First, it is intended to serve as a central reference for all zoning and subdivision code requirements relating to the mixed use zone districts and street standards for mixed use development in Colorado Springs. Requirements and standards for mixed use development appear in various places throughout those two codes, as well as in the *Subdivision Policy and Public Works Design Manual*, which contains the City's street and transportation standards.

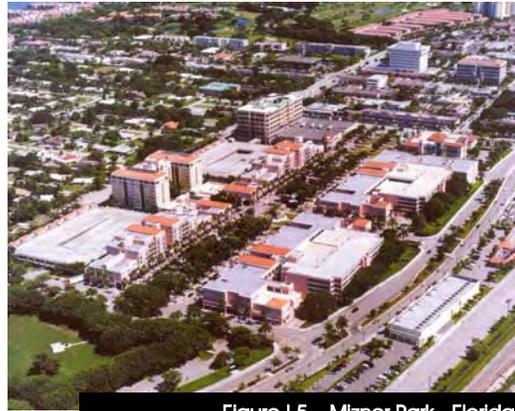


Figure 1.5—Mizner Park, Florida



Figure 1.6—Lowell Town Center, CO

By bringing them all together in a single document, the *Mixed Use Development Design Manual* makes it easier for interested parties to reference, understand and apply City regulations relating to mixed use.



Figure I.7– Mixed use Infill, CO

Second, since mixed use development differs in significant ways from the design of the prevailing single-use development in Colorado Springs, the *Mixed Use Development Design Manual* is meant to provide a guide to the application of the design standards for mixed use through illustrations, visual examples, and design guidelines. Design standards are defined in the Comprehensive Plan as

“Written statements adopted in the Zoning Code by City Council that set forth criteria, goals or objectives for the design of particular areas, systems and elements of the city and how they relate to one other.”

In this case, they apply to those design standards that are codified for mixed use development both in the zoning and subdivision codes. Design guidelines, on the other hand, are defined as

“Written statements, explanatory material, graphic renderings and/or photographs which are intended to provide property owners and the public with specific examples of techniques and materials that can be used to achieve the stated standards.”



Figure I.8– Mixed-use development, CO

Care has been taken to frame the standards as general requirements that can be met through a number of different creative design solutions. The guidelines are suggested approaches that do not preclude alternative techniques that may meet the intent of the standard being proposed.

Third, the *Mixed Use Development Design Manual* is a reference and a guide for designing mixed use developments where they are allowed, either as permitted or conditional uses, under other conventional zone districts. Zone districts that allow a limited mix of commercial, office, and residential as permitted uses include the OC (office complex) and C-5 (intermediate business) zones. Residential uses are also conditional in the C-6 (general business) and PBC (planned business center) zones in combination with their permitted commercial and employment uses, and in the M-1 (light manufacturing) zone with light industrial uses. In all these zone districts, there are no applicable design standards

or guidelines for developing a mix of uses. In these cases, the *Mixed Use Development Design Manual* may be used as a reference for site design techniques, even though the codified provisions and standards would not be required.

When mixed use development is proposed in the PUD (planned unit development) or the SU (special use) zone districts, both of which permit the mixing of residential and nonresidential uses, conformance with the permitted uses and development standards of the new mixed use zone districts is required.

Organization and Overview

The *Mixed Use Development Design Manual* is organized into four major parts. Following this introduction, there is a description of the various ways in which the manual can be used by citizens, neighborhoods, developers, property owners, planners, designers, engineers, and decision makers to plan, design, review, and approve mixed use developments. The next section presents the mixed use zone districts, including a description of each of the three mixed use zones, procedures for establishing them, and their uses. The heart of the manual is the section on design standards and guidelines. That section is broken out into the following features:

- Dimensional Standards
- Blocks, Buildings, and Street Network
- Pedestrian Circulation, Access, and Connections
- On-site Amenities
- Parking
- Landscaping
- Contexts and Transitions

This is followed by specific standards and guidelines, including street cross sections, for

- Streets
- Utilities
- Stormwater Drainage

Finally, the manual concludes with a typical site layout for a mixed use center. The layout depicts a typical design and references the different physical features to the zoning and subdivision codes, in order to show how the various site elements are intended to relate to one another and work together in a mixed use development. Definitions of key terms, the list of figures, and the index are appended.



Figure I.9—900 West Pearl, Boulder, CO



Figure I.10—Neighborhood mixed use, CO



Figure I.11—Mixed use site plan, CO

II. How to Use the Manual

Potential Uses and Users

The primary use of the *Mixed Use Development Design Manual* is as a reference document that can be utilized by any interested party and applied to any phase of the planning, development, and review of a mixed use project. Within that broad spectrum, some of the major users and specific uses of the manual are as follows.

Citizens, including members of neighborhood organizations and nearby property owners, may use the manual as a source of information to evaluate potential impacts of mixed use development with respect to its intensity, context, connectivity, and transitions to adjacent uses.

Decision makers, including members of appointed boards, the City Planning Commission, and City Council may use the manual as a reference for evaluating applications to establish mixed use zone districts.

Property owners looking for potential uses for their real estate may utilize the manual to assess mixed use as a way to create and capture future value on their property.

Developers may use the manual as a source book for the general parameters and particular City requirements that apply to mixed use development in Colorado Springs.

City planners, as well as other City and Utilities staff, may utilize the manual as an information source and guide for reviewing, commenting, and making recommendations regarding mixed use development proposals.

Engineers may wish to consult the manual as a starting point for looking at street design, site improvements, drainage reports, and utility placement.

Architects, landscape architects, and designers will want to pay attention to the design standards and guidelines, particularly those pertaining to building orientation, entrances, and facades, as well as landscaping, lighting, and signage.

Putting the Manual to Work

For a general orientation to the manual, perusing the table of contents and the introduction is the best place to start. For a quick reference to specific topics, the index may be consulted. Those wishing to get an overview of the three mixed use zone districts and the incentives and procedures for establishing them should go directly to *Section III. Mixed Use Zone Districts*. *Section VIII*, entitled “*Putting It All Together*” is for those who want to get a picture of how a typical mixed use commercial center with offices and housing might be designed. The example layout includes references to the code sections, as well as to the design standards and guidelines, in order to show how the various pieces come together in a unified site design. *Section IV. Design Standards and Guidelines* first presents the basic quantitative requirements for site sizes, building heights, parking, landscaping, and other features. It then provides design guidance on the layout of specific site elements and physical features in mixed use developments. *Section V. Street Standards* includes the street types to be used in mixed use developments and presents standards for vehicular, pedestrian, and bicycle access, circulation, and connectivity. Those seeking guidance for planning and locating utilities and drainage facilities should go to *Sections VI. and VII.*

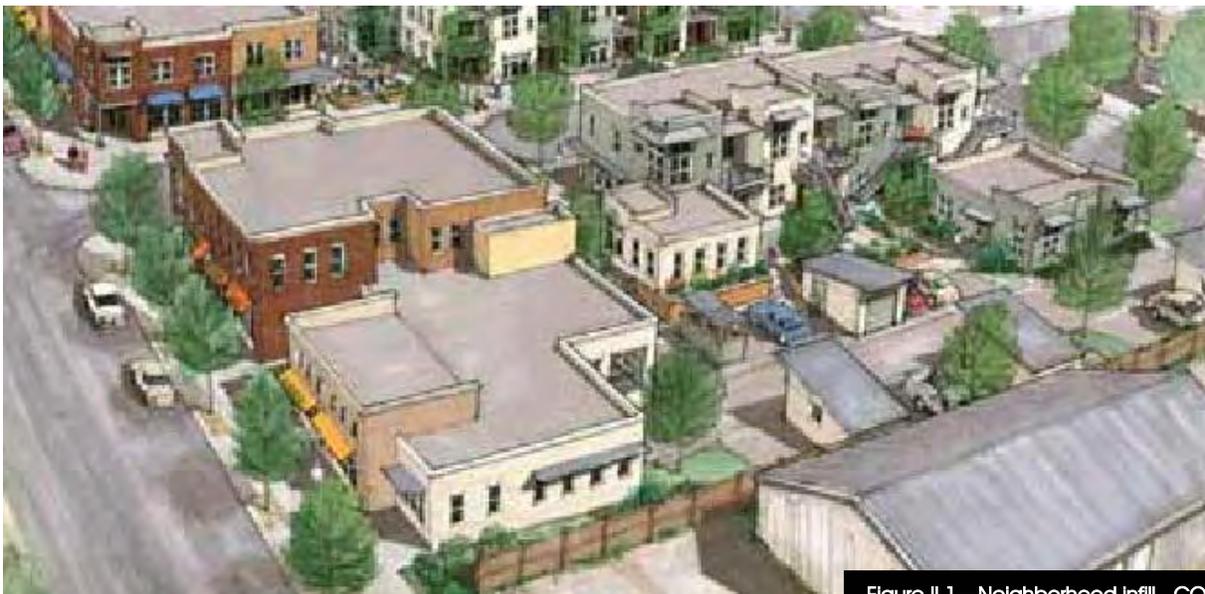


Figure II.1—Neighborhood Infill, CO

III. Mixed-Use Zone Districts

A. Zone Districts

Introduction

There are three zone districts that are specifically tailored to mixed use development in Colorado Springs. They are the Mixed Use Neighborhood Center (MU-NC), the Mixed Use Commercial Center (MU-CC), and the Mixed Use Regional/Employment Center (MU-R/EC). As their names imply, they differ in size, scale, intensity, function, location, and primary uses. This section provides an overview of the three mixed use zone districts, including a description of each zone and their particular purposes. It also maps the two contextual areas for mixed use zoning in the City and describes incentives for utilizing the zones. Finally, it lays out the procedures for establishment of the zones, including concept plans, phasing plans and development plans, and concludes with the permitted and conditional uses and required mix of uses in each zone. References to the corresponding sections of the Zoning Code are provided in parentheses, as well as throughout the text.

Purpose (7.3.701)

The primary purposes of the Mixed Use Zone Districts are to:

- Provide appropriate areas for and facilitate quality mixed use development in activity centers that are consistent with the Comprehensive Plan's land use and transportation goals, objectives, policies and strategies;
- Accommodate intensities and patterns of development that can support multiple modes of transportation, including public transit and walking;
- Group and link places used for living, working, shopping, schooling, and recreating, thereby reducing vehicle trips, relieving traffic congestion, and improving air quality in the City;
- Provide a variety of residential housing types and densities to assure activity in the district, support a mix of uses, and enhance the housing choices of City residents; and
- Integrate new mixed use development with its surroundings by encouraging connections for pedestrians and vehicles and by assuring sensitive, com-

patible use, scale, and operational transitions to neighboring uses.

Descriptions and Typical Locations of Mixed-Use Zone Districts (7.3.703)

MU-NC - Neighborhood Center Mixed Use Zone District

This district is intended to accommodate development of neighborhood centers as described in § 7.2.201 of the Zoning Code. Neighborhood centers are intended to be small, low impact, limited use centers. They are typically pedestrian and bicycle-oriented, with limited automobile access and parking. Neighborhood centers are generally well-integrated into the fabric of the surrounding residential area. They are intended to serve as an amenity for residents of the immediate neighborhood and support a variety of uses.

Neighborhood centers should generally include a limited range of convenience goods and services in keeping with the character and scale of the surrounding neighborhood. Primary uses generally include a

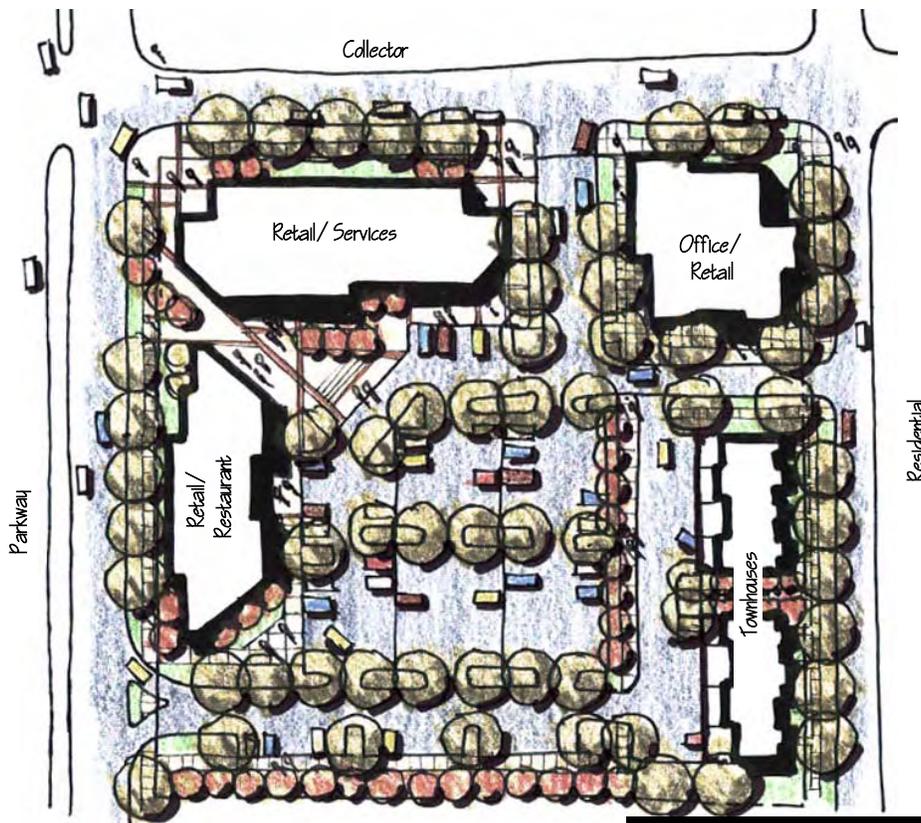


Figure III.1 - Neighborhood center concept

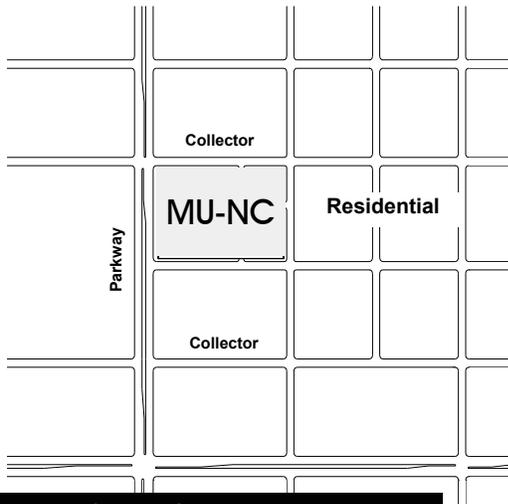


Figure III.2- MU-NC typical location

limited mix of small-scale neighborhood-serving retail, office, service, civic, and attached residential uses. Neighborhood centers may also include establishments such as medical offices, beauty shops and restaurants. Auto-related uses or other uses that produce noxious fumes or excessive light and noise are prohibited within a neighborhood center. Appropriate residential types may include second floor units located above retail uses, and townhouses. Drive-up and drive-through uses are excluded.

Location

The location of a proposed neighborhood center MU-NC zone district should take advantage of daily activity patterns, such as at the corner of a residential collector street, at the entrance to a neighborhood, or in conjunction with a park, school, civic use, or public space. To serve its purposes, the MU-NC district should be sited at the edges of a residential neighborhood, at a collector and arterial street intersection or a collector and local street intersection. MU-NC zone districts should typically be located at least one (1) mile apart from the same type of activity center or MU zone district.

MU-CC - Commercial Center Mixed Use Zone District

This district is intended to accommodate development of commercial centers as described in § 7.2.201 of the Zoning Code. Commercial centers are activity centers that may vary in size and service area. They can serve several neighborhoods within a surrounding residential area with a mix of retail, office, service, civic and attached residential uses, or they can accommodate large retail establishments and serve a number of residential areas and neighborhoods over a significant portion of the City.

Small commercial centers range between ten (10) and thirty (30) acres in size. They are typically anchored by a grocery store, with supporting establishments including, but not limited to, variety, drug and hardware stores, and establishments such as medical offices, beauty shops and restaurants. Secondary uses include other supporting, neighborhood-oriented uses such as schools, small offices, day care, parks and civic facilities, as well as residential uses. Appropriate residential types may include second floor units located above retail uses, townhouses, and small lot, single-family detached homes. The integration of residential uses helps to assure extended hours of activity within the district and support a mix of uses. The district balances automobile access from arterial streets with transit ori-



Figure III.3 — Commercial center concept

entation, pedestrian and bicycle access and circulation, and provides good transitions and connectivity with the surrounding neighborhoods.

Large commercial centers are typically greater than thirty (30) acres in size and include a mix of commercial with supporting office, service, medical, residential and civic uses. Uses generally include large-scale retail uses that provide major durable goods shopping, restaurants and services to multiple residential areas. A variety of integrated uses should be provided, including concentrated office, research and development, institutional, and civic uses. Supporting uses include residential, service, entertainment, eating and drinking establishments, and medical uses. Higher density residential is also a critical component of the large commercial center. Activities and uses should be concentrated and mixed in order to create more diversity and synergy between uses, combine destinations, support more effective transit service, and provide viable pedestrian and bicycle access and circulation. Mobility choices should be integrated by providing transit, pedestrian and bicycle connectivity within the center as well as to adjoining areas.

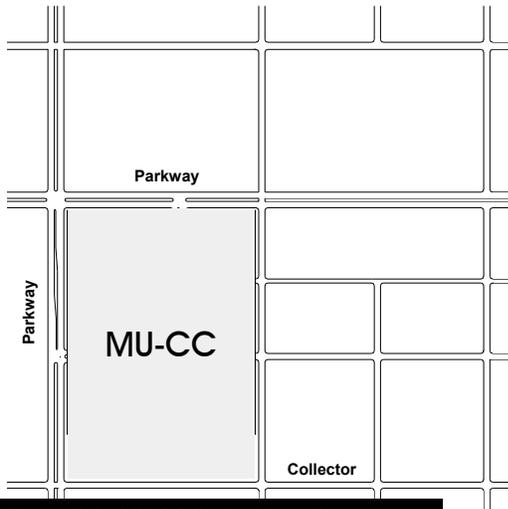


Figure III.4- MU-CC Typical Location

Aging single or limited-use local commercial centers and corridors should be redeveloped as MU commercial centers under this zone.

Location

In general, the location of MU-CC zone districts should balance automobile access from arterial and collector streets with transit orientation and pedestrian and bicycle access and circulation, and provide good vehicle and pedestrian connectivity to surrounding residential areas.

Small MU-CC zone districts shall be located at a minimum of one mile apart and distributed to serve multiple neighborhoods with access from arterial and collector streets. Large MU-CC districts shall be located to serve significant subareas of the City with access from major arterials or expressways.

MU-R/EC - Regional / Employment Center Mixed Use Zone District

This district is intended to accommodate development of regional/employment centers as described in § 7.2.201 of the Zoning Code. The regional/employment district is for large, intensive activity centers that combine the uses of commercial centers and employment centers and serve the city and region as a whole. The MU-R/EC district should be utilized for significant and mutually supportive combinations of commercial and employment activities. Because of their size, both sets of activities function as regional centers in terms of market for retail and employment opportunities.

Higher density residential use is also a critical component of a regional/employment center in order to assure extended hours of activity within the district and provide support for a mix of uses.

Uses should include a mix of commercial and employment uses integrated in a single, mutually supportive regional destination. These uses may range from regional mall anchor stores, government offices, and corporate headquarters to specialty retail and higher density housing. They may also include research and development uses, major service and office center complexes, and major educational facilities, as well as warehousing and industrial uses. Supporting uses may include restaurants, hotels, entertainment, childcare, civic activities, business services, lodging for business travelers, and multifamily residential uses if part of an



Figure III.5- Regional/Employment center

overall planned development.

As with the large commercial centers, activities and uses should be concentrated and mixed in order to create more diversity and synergy among uses, combine destinations, support more effective transit service, and provide viable pedestrian and bicycle access and circulation. Mobility choices should be integrated by providing transit, pedestrian and bicycle connectivity within the center as well as to adjoining areas.

Location

A MU-R/EC zone district should typically be located at the intersection of two major arterial streets, along major arterial roads, along the city's planned transit system, near other major regional transit terminals, or in close proximity to limited access freeways and interstate highways. Concentrated employment activities should be located within MU-R/EC zone districts whenever possible. Sites with direct access to existing or planned major transportation facilities and compatibility with adjacent land uses are appropriate for the MU-R/EC zone district.

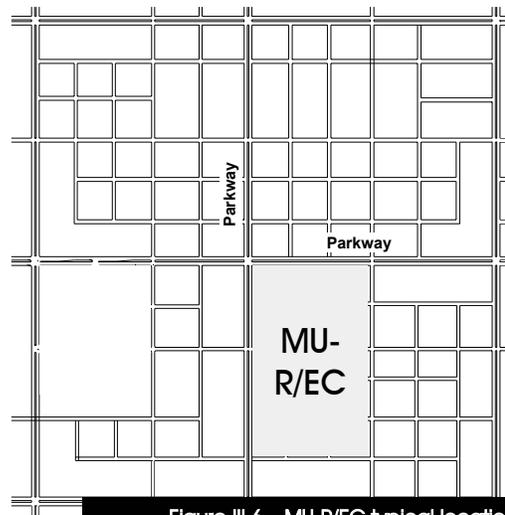


Figure III.6—MU-R/EC typical location

B. Establishment of Contextual Areas in City (7.3.705)

For the purposes of applying the MU development standards in chapter 7, articles 3 and 4 of the Zoning Code, the City hereby establishes two (2) contextual areas within the City: (1) the "Older/Established" Contextual Area, and (2) the "Newer/Developing" Contextual Area. These areas are depicted on the map below. The "Older/Established" Area is generally defined as that area of the City established prior to 1985. New development within the "Older/Established" Contextual Area is considered "infill" and "redevelopment," as defined in article 2. The "Newer/Developing" Contextual Area is generally defined as those areas of the City established later than 1985.

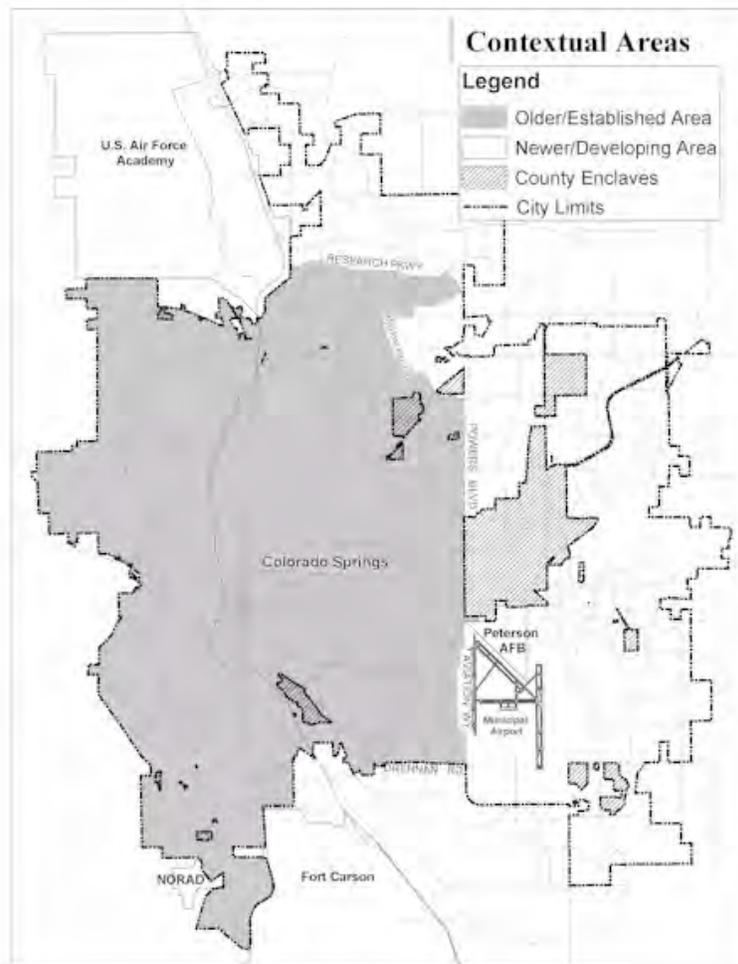


Figure III.7 Map of Contextual Areas

The "Infill" boundary is equivalent to the boundary of the "Older/Established Contextual Area." All land areas outside of the Older/Established Contextual Area boundary are included in the Newer/Developing Contextual Area.

C. Incentives in the Mixed-Use Zoning Districts (7.3.708)

Regulatory incentives are provided in the MU zoning districts to encourage and facilitate creative MU development. Following is a summary of the incentives provided and cross-referenced to the applicable Zoning Code sections:

1. Broader application of staff authority to grant administrative relief from specified development and design standards to development in the new MU zoning districts. (7.5.1103.B.).
2. Modifications of certain standards that reflect less demand in MU projects, such as off-street parking. (7.4.203).
3. Alternative Compliance: An applicant may propose alternative compliance to the strict application of design standards, such that the alternative:
 - (1) achieves the intent of the subject design standard to the same or better degree than the subject standard;
 - (2) achieves the mixed-use goals and policies in the comprehensive plan to the same or better degree than the subject standard;
 - and (3) results in equivalent or better benefits to the community than compliance with the subject design standard. Features which may be substituted or modified to achieve alternative compliance include but are not limited to:
 - Pedestrian walkways through parking lots; § 7.4.703(B)(3).
 - Pedestrian passthrough requirement, § 7.4.703(D).
 - Maximum block length requirements, § 7.4.1203(B).
 - Alternative site layout and building orientation, § 7.4.1205(C).
 - For infill development and redevelopment sites containing no more than twenty-five acres and bordered by developed land along the entire perimeter (excluding intervening public streets), existing onsite and offsite features that are equivalent in function to those required under article 4, part 7-12 may be substituted or modified as alternative compliance to meet the MU standards. Existing features which may be substituted or modified to achieve alterna-

tive compliance include, but are not limited to: streets, alleys, street crossings, tree lawns (parkways), sidewalks, pedestrian walkways, building entrance orientation, building and entrance design, and streetscape design.

The procedures and criteria for alternative compliance are presented under D. Process below.

4. A longer term of approval for concept plans. See § 7.5.504(C) (Expiration) and § 7.9.101(B).

5. Longer vesting of property rights connected with an approved development plan. See § 7.5.504(C) and § 7.9.101(B).

6. A greater number and variety of uses allowed in the MU zone districts versus in the other base zone districts. See § 7.3.704.

7. Use of Special Districts. The City will generally support the formation and utilization of a special district in a MU zone district, when the proposed improvements, infrastructure, and maintenance services of the special district will fulfill the mixed use site development standards as set forth in article 4, parts 7-12 of the Zoning Code and the *Mixed Use Development Design Manual*.

D. Process

Establishment (7.3.702)

Mixed Use Concept Plan

The application to establish a MU zone district shall include a MU concept plan that describes and illustrates, in written and graphic format, the intended locations and quantities of proposed uses, the layout of proposed vehicle and pedestrian access and circulation systems, provision of transit facilities, and areas designated to meet requirements for open space, parking, on-site amenities, utilities and landscaping. It shall include statements or conceptual plans describing how signage and lighting will be designed in a unified and integrated manner on site. In addition, the MU concept plan shall indicate how the proposed uses will relate to the surrounding properties. The submittal of a concept statement in lieu of a MU concept plan shall not be permitted. The requirement for a MU concept plan is waived if a complete development plan for the entire zone district is submitted.

Review Criteria

In addition to the review criteria for all concept plans set forth in article 5, part 5 of the Zoning Code, the following review criteria shall apply to MU zone concept plans.

General

- Is the proposed MU concept plan consistent with the Comprehensive Plan, the 2020 Land Use Map and all applicable elements of the Comprehensive Plan?
- Is the proposed MU concept plan consistent with any City-approved master plan that applies to the site?

Mix of Uses

- Are the mix and location of principal uses consistent with the intent and standards of the applicable MU zone district?
- Is the residential use well integrated with other uses, and do the proposed housing types and densities assure activity and support the mix of uses in the development?
- Do open spaces serve as amenities and support transportation modes such as walking and bicycling?

- Are build-to lines established along perimeter streets located to support a pedestrian-oriented streetscape?

Access and Circulation Systems

- Do vehicular and pedestrian ways provide logical and convenient connections between proposed uses, and to existing or proposed uses located adjacent to the proposed MU center, and do they establish a high level of connectivity?
- Does the hierarchy of perimeter and internal streets disperse development-generated vehicular traffic to a variety of access points, discourage through traffic in adjacent residential neighborhoods, and provide neighborhood access to on-site uses?
- Are existing or proposed transit routes incorporated into the MU center through the location of appropriate transit facilities, and related pedestrian improvements?

Parking

- Are automobile and bicycle parking areas located to support principal uses, minimize potential negative impacts on adjacent properties, discourage an exclusive automobile orientation and provide a safe environment for pedestrians, motorists, cyclists and transit users?

General Utility Infrastructure

- Do the general utility layout, proposed right-of-ways, utility corridors and easements show appropriate points of connection for water, wastewater, natural gas, electric and telecommunication utilities?
- Is the capacity, age and condition of utility infrastructure sufficient to meet the needs of the MU center at build-out, and if not, have proper relocation, replacement or other modifications been shown?

On-Site Amenities and Landscaping

- Do the general location and type of on-site amenities provide desirable open space, create an inviting image, enhance the pedestrian envi-

ronment and offer spaces for people to gather, interact, and rest?

- Do landscaping themes that relate to individual streetscapes, internal landscaping, parking lot landscaping and buffers contribute ecologically and aesthetically to the character of the MU center and support a pedestrian-friendly environment?
- Are areas of unique or significant natural features integrated into the MU center?

Signage and Lighting Systems

- Does the lighting system unify the development and is it compatible with and does it complement surrounding neighborhoods?
- Are signage themes designed to unify the MU center?

Consideration of Context and Transitions to Adjacent Areas

- Do the proposed transitions ease the progression from more intense to less intense land uses and building masses and mitigate visual impact, uses or activities that could be reasonably regarded as nuisances by neighbors?

Mixed Use Concept Plan Amendments

In addition to the review criteria for all concept plans set forth in article 5, part 5 of the Zoning Code, the following review criteria shall apply to MU zone concept plan amendments.

An MU concept plan amendment application shall be submitted when:

- There is a proposed change in the general location of an approved principal use, or
- There is a proposed change in the amount, type or density of residential uses, or
- There is a proposed change in pedestrian or vehicular circulation systems, right-of-ways, utility corridors or easements, or
- There is a proposed change of use that would change the location or amount of required parking, or

- There is a proposed change in uses that would change trip generation calculations, or
- There is a proposed change to an existing phasing plan.

A MU concept plan amendment request shall include maps of the entire MU zone district, and shall update all development information in written and graphic format since adoption of the MU concept plan or the most recent amendment.

Expiration of a MU Concept Plan

A MU concept plan shall expire under any of the following circumstances:

- Six (6) years have occurred since approval of the MU concept plan and no development plan that implements the MU Concept Plan has been approved; or
- Six (6) years have occurred since approval of a development plan that implements the Mixed Use Concept Plan.

Extension of a MU Concept Plan

A one (1) year extension may be issued by the Director, provided that a written request has been received prior to the expiration of the MU concept plan, and the Director has determined that no major changes in the city's development standards, or changes in the development pattern of the surrounding properties has occurred.

Phasing Plan

An application to establish a MU-CC or a MU-R/EC zone district shall include a phasing plan that describes and illustrates, in written and graphic format, implementation of the MU concept plan when development is anticipated to occur in multiple phases over a number of years. A phasing plan shall be a working document used to identify the sequence, timing and responsibility for construction of necessary utilities and infrastructure. The requirement for a phasing plan is waived if a complete development plan for the entire zone district is submitted.

The phasing plan shall show how the project is to be incrementally developed. It shall show the phasing of

principal uses, transition tools, pedestrian improvements, streets, utilities, drainage improvements, building areas, parking, and interim uses. It shall relate the development phases to infrastructure requirements for each phase. If a phased project proposes a disproportionate share of the mix of uses, open space, landscaping, recreational facilities or other common amenities to future phases, assurances are required so that if the future phases are not developed, a sufficient mix of uses, open space, landscaping, recreational facilities or common amenities shall be provided for the phases actually developed.

- Assurances shall be in the form of a letter of credit, escrow or recorded agreement by the mortgage holder, or if none, by the property owner guaranteeing the development of common amenities.
- Assurances shall be submitted before a phasing plan for the MU zone district is approved.

Finally, an amendment to a phasing plan shall be processed as an amendment to a concept plan.

Development Plan

Before building permits may be issued in a MU zone district, a development plan that implements the approved MU concept plan, if any, and this Zoning Code must be approved. Diversification of ownership shall not be considered a valid basis or justification for a variance or an amendment to a previously approved development plan. All development in MU zone districts shall be in conformance with the approved development plan.

Review Criteria

In addition to the review criteria for all development plans set forth in article 5, part 5 of the Zoning Code, the following review criteria shall apply to development plans in MU zone districts.

- Is the proposed development plan consistent with the Comprehensive Plan, the 2020 Land Use Map and all applicable elements of the Comprehensive Plan?
- Is the proposed development plan consistent with the intent and purposes of this Zoning Code?
- Does the proposed development plan implement the concept plan, if any?

- Does the proposed development plan implement the phasing plan, if any?
- Does the proposed development plan demonstrate how the applicable MU zone district purposes, requirements, and standards as set forth in §§ 7.3.703, 7.3.704, 7.3.705, 7.3.706 and 7.3.707 are met?
- Does the proposed development plan demonstrate how the applicable MU zone district lighting standards as set forth in § 7.4.102(D) are met?
- Does the proposed development plan demonstrate how the applicable MU zone district parking standards as set forth in §§ 7.4.202, 7.4.203, 7.4.205 and 7.4.208 are met?
- Does the proposed development plan demonstrate how the applicable bicycle parking and facilities standards as set forth in § 7.4.209 are met?
- Does the proposed development plan demonstrate how the applicable MU zone district landscaping standards as set forth in §§ 7.4.320, 7.4.322 and 7.4.323 are met?
- Does the proposed development plan demonstrate how the following applicable MU site development standards are met?

Pedestrian and bicycle standards as set forth in article 4, part 7.

Transit standards as set forth in article 4, part 8.

Vehicle access and circulation standards as set forth in article 4, part 9.

On-site community amenities standards as set forth in article 4, part 10.

Transition standards as set forth in article 4, part 11.

Site development and design standards as set forth in article 4, part 12.

Procedures and Criteria for Alternative Compliance

Alternative compliance is a procedure that allows development to occur where the intent of the Zoning Code and the design standards for mixed use are met through an alternative design. It is not a general waiver of regulations. Rather, it permits a site-specific plan to incorporate an alternative design that is equal to or better than the strict application of a design standard in meeting the intent of both the particular MU zone district and the applicable standard.

If a concept plan or development plan is to include a request for approval of alternative compliance, a pre-submittal conference is required to determine the preliminary response from City Planning. Based on that response, the application for a concept plan or development plan shall include sufficient explanation and justification, in both written and graphic form, for the alternative compliance requested. A request for approval of alternative compliance may include proposed alternatives to one or more design standards.

To grant a request for alternative compliance the following criteria must be met:

1. The proposed alternative achieves the intent of the subject design standard to the same or better degree than the subject standard.
2. The proposed alternative achieves the mixed-use goals and policies in the Comprehensive Plan to the same or better degree than the subject standard.
3. The proposed alternative results in benefits to the community that are equivalent to or better than compliance with the subject design standard.

Alternative compliance shall apply to the specific site for which it is requested and does not establish a precedent for assured approval of other requests.

E. Uses

Permitted, Conditional and Accessory Uses (7.3.704)

The following table shows the land uses allowed in the MU zone districts. Principal permitted uses are shown as P, conditional uses are shown as C, and accessory uses are shown as A.

If a listed use is not marked with a P, C, or A in a particular zone district, that use is prohibited in such zone unless otherwise allowed by the City through a use variance (§ 7.5.803).

Any similar use not listed in the table may be allowed as a principal, conditional, or accessory use in a MU zone district where similar uses are allowed in conformance with §7.2.108.

The uses allowed in these districts are subject to the standards in this part 7 (MU districts), the applicable parking, landscaping, sign, and other general site development standards in article 4, and the applicable administrative and procedural regulations in article 5.

The following table lists the permitted, conditional and accessory uses in the MU zone districts. Those zone districts denoted by an asterisk (*) are subject to the additional standards for specific land uses found in § 7.3.707.

Table 1 Permitted, Conditional and Accessory Uses in Mixed Use Zone Districts

	MU-NC	MU-CC	MU-R/EC
Residential Use Types			
Accessory Dwelling Unit	A*	A*	A*
Duplex on an individual lot	P	P	P
Dormitories	P	P	P
Human Service Establishment			
Human service facility	C	P	P
Hospice	C	P	P
Nursing Home	C	P	P
Youth Home	C	P	P
Human service home	P	P	P
Human service residence	P	P	P
Hospice	P	P	P
Youth Home	P	P	P
Family Care/Foster Adopt Home	P	P	P
Human service shelter	C	P	P
Health Care Support Facility	C	P	P
Live/Work Structure	P	P	P
Manufactured Home		P	P
Multi-family dwelling			
Above First Floor	P	P	P
Apartment	P	P	P
Condominium	P	P	P
Townhouse	P	P	P
Retirement home	P	P	P
Rooming house	P	P	P
Single Family Detached Dwelling on Individual lot		P	P
Manufactured Home		P	P
Office Use Types			
Financial services	P*	P	P
General offices	P*	P	P
Medical offices	P*	P	P
Commercial Use Types			
Agricultural sales and service		C	C
Automotive and Equipment Services			
Automotive rentals		C	P
Automotive repair garage		P	P
Automotive sales			C
Automotive wash		C	C
Auto Service		P	P
Body and fender repair services		C	C
Bar	C	P	P
Bed and breakfast inn	P*	P	P
Building maintenance services		C	P
Building office support services		P	P
Business park	C	C	P
Commercial center		P	
Communication services	P*	P	P
Construction sales and services:			
Completely enclosed		P	P
Includes outside activities		C	P
Consumer convenience services	P*	P	P
Consumer repair services	P*	P	P
Exterminating services			P
Food sales:			
Specialty food sales	P*	P	P
General food sales		P	P
Convenience food sales	P*	P	P
Funeral services	C	P	P

	MU-NC	MU-CC	MU-R/EC
Commercial Use Types (cont.)			
Neighborhood Serving Retail equal to or less than 5000	P*	P	P
Mid-size Retail greater than 5000 sq. ft. and less than		P	P
Large Retail greater than 50,000 sq. ft.		P	P
Hotel/Motel		P	P
Kennels		C	C
Liquor sales	P*	P	P
Personal improvement services	P*	P	P
Personal services	P*	P	P
Pet services	P*	P	P
Pharmacy	P*	P	P
Recreation, commercial:			
Indoor entertainment	P*	P	P
Indoor sports and recreation	P*	P	P
Outdoor entertainment		P	P
Outdoor sports and recreation		P	P
Restaurants:			
Drive-up or fast food	P*	P	P
Sit down - served at table	P*	P	P
Outdoor Seating	P	P	P
Sexually Oriented Business		C	C
Surplus sales		C	C
Teen club/Young Adult Club		C	C
Veterinary service (small animals)			
Completely enclosed structure	P*	P	P
Civic Use Types			
Administrative/Safety services	P*	P	P
Club (Membership, Social and Recreational))	P*	P	P
Cultural services	P*	P	P
Day care services	P*	P	P
Educational Institutions			
Charter School		C	C
College and university		C	C
Non-public schools		C	C
Proprietary schools	P	P	P
Public schools		C	C
Hospital			P
Public assembly		P	P
Public Parks and Recreation (including Public Plazas)	P	P	P
Religious Institution	P*	C*	P
Semi-Public Community Recreation	P*	P	P
Social service center	P*	C	P

	MU-NC	MU-CC	MU-R/EC
Industrial Use Types			
Custom manufacturing	P*	P	P
General Industry, Light			P
Limited General Retail Services			A
Manufacturing			
Research and development		C	P
Parking Use Types			
Parking lot/surface parking (as a principal use)			
Private	A	P	P
Public		P	P
Parking structure			
Private		P	P
Public		P	P
Transportation Use Types			
Transportation terminal		P	P
Transit Station	C	P	P
Transit Shelter	P	P	P
Miscellaneous Use Types			
Broadcasting Tower	C	C	C
Free-standing facility	C	C	C
Roof/building mount	P	P	P
Roof/building mount which exceeds height limit	C	C	C
Stealth Free-standing facility	C	C	C
J. Transition Use Types			
	P	P	P

Additional Standards for Specific Land Uses (7.3.707)

Access to Components in a Vertical MU Building: Separate pedestrian access and entrances shall be provided for the different uses within a vertical MU building.

Accessory Dwelling Units: Accessory dwelling units are allowed in any MU zone district as an accessory use to a principal single-family detached, duplex and town-house dwelling. Accessory dwelling units within a MU zone district shall comply with the accessory dwelling unit standards applicable in the traditional neighborhood development zone district (§ 7.3.102(J)).

Accessory Limited General Retail Services: Limited general retail services are allowed as an accessory use to a principal industrial use type only. They may be operated on the same lot as the principal industrial use and in conjunction with uses that are specifically allowed in a specific district. In the MU-R/EC zone district, such accessory retail sales must be conducted within the same building as the principal permitted use.

Automobile Service and Repair: This use shall meet the following conditions:

- Body and fender repair service is a conditional use only in the MU-CC and MU- R/EC zone districts;
- All work is done within an enclosed building;
- Outside storage of automotive parts or junk vehicles is prohibited; and,
- The nearest point of the building in which the activity occurs is more than one hundred (100') feet from the boundary of a residential district or use measured in a straight line.

Live/Work Units: Live-work units are subject to the following standards in addition to those requirements cited in § 7.2.201:

- Multiple live-work units may occur in one (1) structure.
- On-premises signs are limited to no more than two (2) non-animated, non-illuminated wall or window signs collectively not exceeding eight (8) square feet in total area.



Figure III.8 Live/work units

Liquor Establishment: On-premise liquor establishments in the specified zone districts shall be located no closer than two hundred feet (200') from any residentially used or zoned property. The measurement shall be from the property/lot line of the liquor establishment to the property/lot line of the residentially zoned/used property. The distance requirement shall not apply if the residentially zoned property is separated from the property of the liquor establishment by a major street as defined in the City's Subdivision Code. The distance requirements of this subsection shall not apply to an on-premise liquor establishment that is also a restaurant if the bar area does not constitute more than thirty-five percent (35%) of the floor area.

Outdoor Storage: In the MU-NC zone district, outdoor storage of any materials related to nonresidential uses is prohibited. In the MU-CC and MU-R/EC zone districts, outdoor storage is allowed as an accessory use to a non-residential use if it is enclosed on all sides by

a screening wall or solid fence which is at least six feet (6') in height. In no event shall materials be stacked or stored to exceed the height of the screening fence or wall.

Size Limits on Individual Uses in the MU-NC Zone District: In order to minimize the impact of non-residential uses within a MU-NC zone district on the surrounding residential neighborhood, the specific uses subject to this provision, as shown in the Use Table in § 7.3.704 above, may not exceed five thousand (5,000) square feet in gross floor area in any single building.

Veterinary Clinics and Animal Hospitals: All activities must be conducted within a totally and permanently enclosed, soundproofed building and are restricted to small animal care with boarding of animals overnight only due to the animal's medical condition and associated treatment at the clinic/hospital.

Required Mix of Uses

To ensure a balance between housing, retail, office, and other commercial development within the MU zone districts, the following standards shall apply:

Table 2 Required Mix of Uses				
Standard:	Mixed Use Zone District			
	MU-NC	MU-CC <30 ac	MU-CC 30+ ac	MU-R/EC
Minimum Number of Principal Use Types [2] [3]	2	3	3	3
Residential Use Required as Part of Mix?	Yes	Yes	Yes	Yes
Minimum Percentage Total Gross District-Wide Acreage for Residential Use [1] [2]	N/A	N/A	10%	10%
Maximum Percentage Total Gross District-Wide Acreage Occupied by a Single Use Type	N/A	80%	80%	80%

[1] **Credit for Residential Units in a Vertical Mixed-Use Building:** Credit for Residential Units in a Vertical MU building: As applicable, the total acreage of a site developed with a vertical MU building containing multi-family dwelling units above the first-floor shall be credited toward meeting this minimum 10% standard.

[2] **Substitution of Adjacent Residential Uses:** As applicable, existing residential uses immediately adjacent to a MU zone district that meet the same standards for minimum density and vehicular, pedestrian and bicycle connectivity as residential uses within the zone district, and are within at least a quarter-mile distance from the boundary of the zone district, shall be credited toward meeting the required residential use and the minimum 10% standard.

[3] Residential is a required use type in all MU zone districts. Other principal use types are listed in Table 2: Permitted, Conditional and Accessory uses.

Mix of Uses Required in Phased Developments

Subject to the overall mix of use ratios established under § 7.3.702(A), phased development in a MU- CC or MU- R/EC zone district shall include a mix of approved principal uses either in each phase, so that no one type of use is developed exclusively in the district at any one time, or in successive phases, so that the

required mix is developed with the sequential completion of successive phases. If the first phase includes only one of the proposed mix of uses, then the completion of one or more subsequent phases with another of the proposed mix of uses must occur within six (6) years from the approval date of the original concept plan. For purposes of this provision, the land area of a site or parcel developed with a vertical MU building containing two non-residential uses shall be allocated proportionately according to the square footage of the different non-residential uses contained in the building. For residential uses, the total acreage of the site developed in a vertical MU building containing multifamily dwellings above the first floor shall be credited toward the meeting the residential use requirement.

IV. Design Standards and Guidelines

One of the purposes of the *Mixed Use Development Design Manual* is to act as a guide for applying site development and design standards to mixed use projects by providing written guidelines, illustrations, and visual examples. Design standards for mixed use development are codified requirements in the Zoning or Subdivision Code. Design guidelines, on the other hand, provide property owners and the public with examples of techniques that can be used to achieve the standards. The standards are general requirements that can be met through a number of different creative design solutions. The guidelines are suggested approaches that do not preclude other alternative techniques from also being proposed as long as they meet the intent of the standards.

This section starts out with a listing of the quantitative, dimensional standards that apply to the MU zone districts. Following that is a series of site design standards and guidelines for block and street layout, building placement, access and circulation, connectivity, public amenities, parking, landscaping, and transitions. The section concludes with standards for transit facilities, lighting, and signage. Taken together, these standards and guidelines represent a package of general site layout requirements and site design approaches for mixed use development in the three MU zone districts. Additional standards specifically related to street design, utilities, and drainage can be found below in their own separately titled sections.

Each set of design standards below begins with a brief introduction and a purpose statement followed by the applicable codified standards and, in most cases, associated guidelines. Where no standards have been codified, only guidelines may be provided. Both standards and guidelines are illustrated as needed.

A. Development (Dimensional) Standards (7.3.706)

Introduction

The following table lists the dimensional standards for the MU zone districts. These standards include the minimum and maximum district size, minimum lot area, maximum building height, and applicable build-to lines (Figure IV.1). Other dimensional standards that apply to landscaping, parking, signs, fences, lighting and preservation areas in the MU zone districts are listed in Article 4 of the Zoning Code.

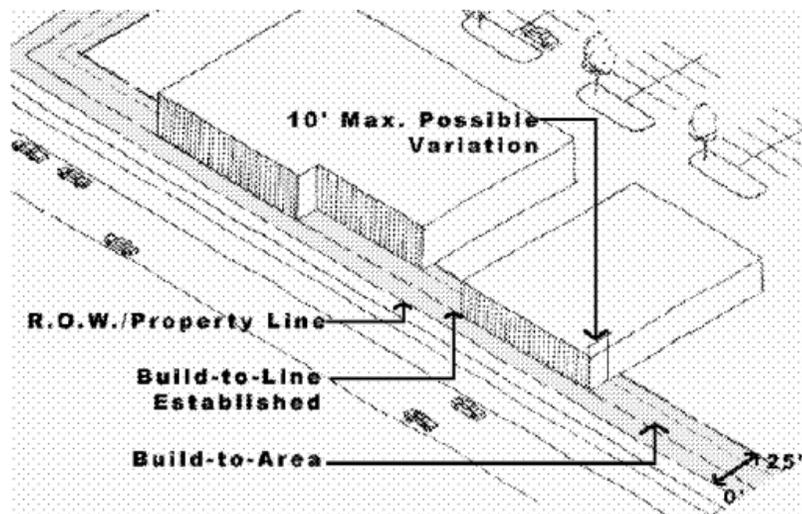


Figure IV.1—Build-to lines

**Table 3 Development (Dimensional) Standards
Mixed Use Zone Districts**

STANDARDS	MU-NC	MU-CC	MU-R/EC	NOTES TO TABLE/ADDITIONAL REGULATIONS
DISTRICT SIZE				
Minimum District Size	none	10 ac	50 ac	
Maximum District Size	10 ac	none	none	
MINIMUM DISTRICT-WIDE AVERAGE FLOOR AREA RATIO (FAR)				
Newer/Developing Contextual SubArea	none	0.25	0.25	<ul style="list-style-type: none"> • Calculation: FAR is calculated as an average across the entire zone district-<i>i.e.</i>each individual building site or lot does not need to meet the minimum FAR as long as the minimum FAR is met across the entire zone district. FAR shall be calculated based on the gross land area in the district measured from adjacent street center lines. • Applied to Vertical Mixed Use Buildings. The total gross floor area devoted to non-residential uses in a vertical mixed use building shall be included in the calculation of minimum FAR. • Administrative Relief. Administrative relief may be granted for up to a 12% reduction or a minimum of .22 FAR based on physical site constraints of topography, drainage, and the preservation of significant natural features.
Older/Established Contextual Subarea	none	0.25	0.25	
Maximum FAR	none	none	none	
MINIMUM RESIDENTIAL DENSITY				
Newer/Developing Contextual Area	none	8 dwelling units per acre	8 dwelling units per acre	<ul style="list-style-type: none"> • Calculation: Residential density shall be measured as an average over the gross land area of only the residential portion of the planned site or zone district. • Exemption: Subject to the mix of use requirements in §7.3.702 above, when residential uses in a mixed-use center are all contained in vertical mixed-use buildings, the development shall be exempt from this minimum residential density requirement. • Credit for Residential Density in Vertical Mixed-Use Buildings: Subject to the mix of use requirements in §7.3.702, when an activity center contains land area devoted to residential uses in single-purpose buildings, any additional residential dwelling units contained in vertical mixed-use buildings within the Mixed-Use center may be credited toward meeting this minimum residential density requirement.
Older/Established Contextual Area	none	8 dwelling units per acre	8 dwelling units per acre	
MAXIMUM BUILDING HEIGHT				
Newer/Developing Contextual Sub Area	35 feet	45 ft ^{1,2,3}	65 ft ^{1,2,3}	<ol style="list-style-type: none"> 1. Except in the MU-NC district, requests for additional height shall be subject to the standards and criteria in HR-High Rise Overlay Zone (§7.3.503). 2. To provide a sensitive transition between land uses of different intensities, any portion of a building within a mixed-use zone district located within 100 feet of a single-family or two-family dwelling shall not exceed 40 feet in height 3. Additional height may be allowed when a parking structure is integrated into the design of a building housing a principal use, as stated in §7.4.208 (Parking Structures).
Older/Established Contextual Area	The maximum building height shall not exceed the lesser of: [1] 125% of the average height of buildings located on the same and facing block faces; or [2] 5 feet more than the existing height(s) of the immediately adjacent building or buildings.			

STANDARDS	MU-NC	MU-CC	MU-R/EC	NOTES TO TABLE/ADDITIONAL REGULATIONS
FRONT BUILD-TO LINES (BY STREET TYPE)				
Perimeter or Internal Streets (by Mixed Use Street Classification)				<ul style="list-style-type: none"> The maximum front build-to line requirements shall apply to both street sides of a corner lot or site. The maximum front build-to line applies to principal and accessory buildings and structures, but not including off-street surface parking lots/areas or entryway features or signage. For perimeter parkways or arterial streets, the build-to line for the entire length of the street frontage along the zone district shall be set within the 0' to 25' build-to area on the Concept Plan. The primary façade of each building may vary up to a maximum of ten feet behind the build-to line as set on the Concept Plan, but shall not extend beyond the maximum 25' build-to area. For perimeter parkways or arterial street frontages that form the boundary of a mixed use zone district, if 50% or more of the entire length of the street frontage along the zone district is occupied by building wall, then the edge of the parking areas, including screening walls, adjacent to the buildings may be pulled up to within 4' of the building façade. If less than 50% of the entire length of the street frontage along the zone district is occupied by building wall, then the edge of the parking areas, including screening walls, adjacent to the buildings must be set at the maximum 25' build-to line. The maximum front build-to line requirements shall apply only to the lower 30 feet or first two stories, whichever is less, of a building, and higher portions of the building may be stepped back further from the front property line. To encourage pedestrian-friendly streets by bringing buildings close to pedestrian sidewalks and ways, the City encourages principal nonresidential buildings to be built to the back edge of the public sidewalk (zero (0) feet build-to line), except as necessary to allow room for outdoor seating and service areas, outdoor sales and displays, landscaping, emphasized entryways integral to the building design, and similar pedestrian and customer amenities. The build-to area between the front property line and the front building wall of residential structures may be used to provide space for privacy, landscaping, private courtyards/open areas, emphasized entryways integral to the building design, and similar resident amenities.
Expressway	Not applicable			
Parkway—6 Lane	Min: 0 ft. Max: 25 ft.			
Parkway—4 Lane	Min: 0 ft. Max: 25 ft.			
Entry/Spine Street	Min: 0 ft. Max (No residential on ground floor): 5 ft. Max (Residential on ground floor): 15 ft.			
Collector Street	Min: 0 ft. Max (No residential on ground floor): 5 ft. Max (Residential on ground floor): 15 ft.			
Local	Min: 0 ft. Max (No residential on ground floor): 5 ft. Max (Residential on ground floor): 10 ft.			
Minimum Building Separation on Alleys	Minimum 30' building-face-to-building-face separation across width of alley			

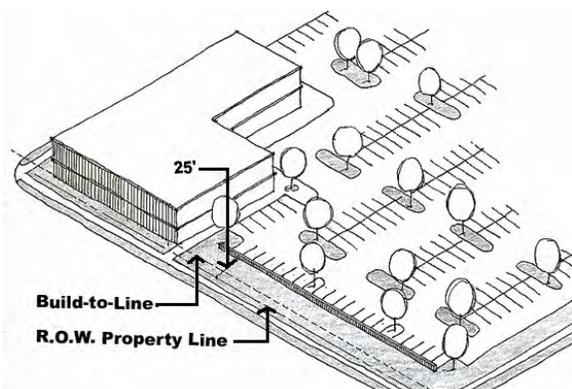


Figure IV.2—Parking with less than 50% building frontage

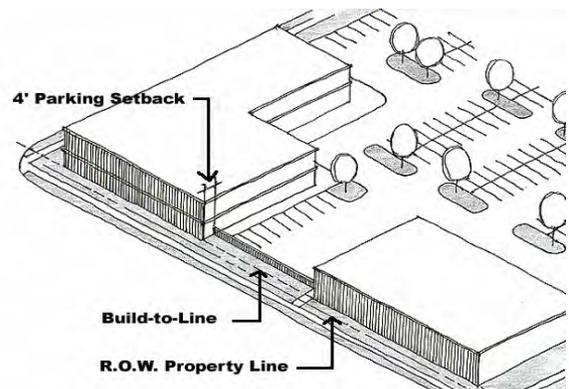


Figure IV.3—Parking with 50% or more building frontage

B. Blocks, Buildings and Street Networks

Introduction

The single most important element in the physical and functional integration of mixed use development is pedestrian orientation. The overall layout of a mixed use project is built around a viable pedestrian realm that includes the pedestrian-friendly improvements necessary to generate a high level of pedestrian activity. The framework for a pedestrian-oriented layout has three main components: 1) a block structure that reflects a walkable arrangement and positioning of uses, 2) building placement, orientation, and design to enhance the pedestrian environment and streetscape within that structure, and 3) a street network to define the block edges, create continuous pedestrian connections, and integrate pedestrian travel with other modes of transportation.



Figure IV.4— A rational block pattern with connected streets

Purpose

This part is intended to provide pedestrian-oriented development by establishing well-defined pattern of walkable blocks and intersecting streets, by ensuring that building facades and streetscapes are designed to be human-scaled and pedestrian friendly, by ensuring that buildings relate appropriately to surrounding development, by creating a heightened sense of place, by providing safe, efficient and convenient vehicular access and circulation patterns, and by promoting pedestrian-friendly new development in MU zone districts.

Blocks

Standards (7.4.1203)

1. Block standards shall apply to all development that contains four (4) acres or more of gross land area.
2. All development shall be arranged in a pattern of interconnecting streets and blocks, while maintaining respect for the natural landscape and floodplain.
3. Each block face shall range between a minimum of two hundred (200) feet and a maximum of six hundred (600) feet (Figure IV.5).
4. The average block face across each development site and the entire MU zone district shall be a maximum of five hundred (500) feet.
5. For block faces that exceed four hundred (400)

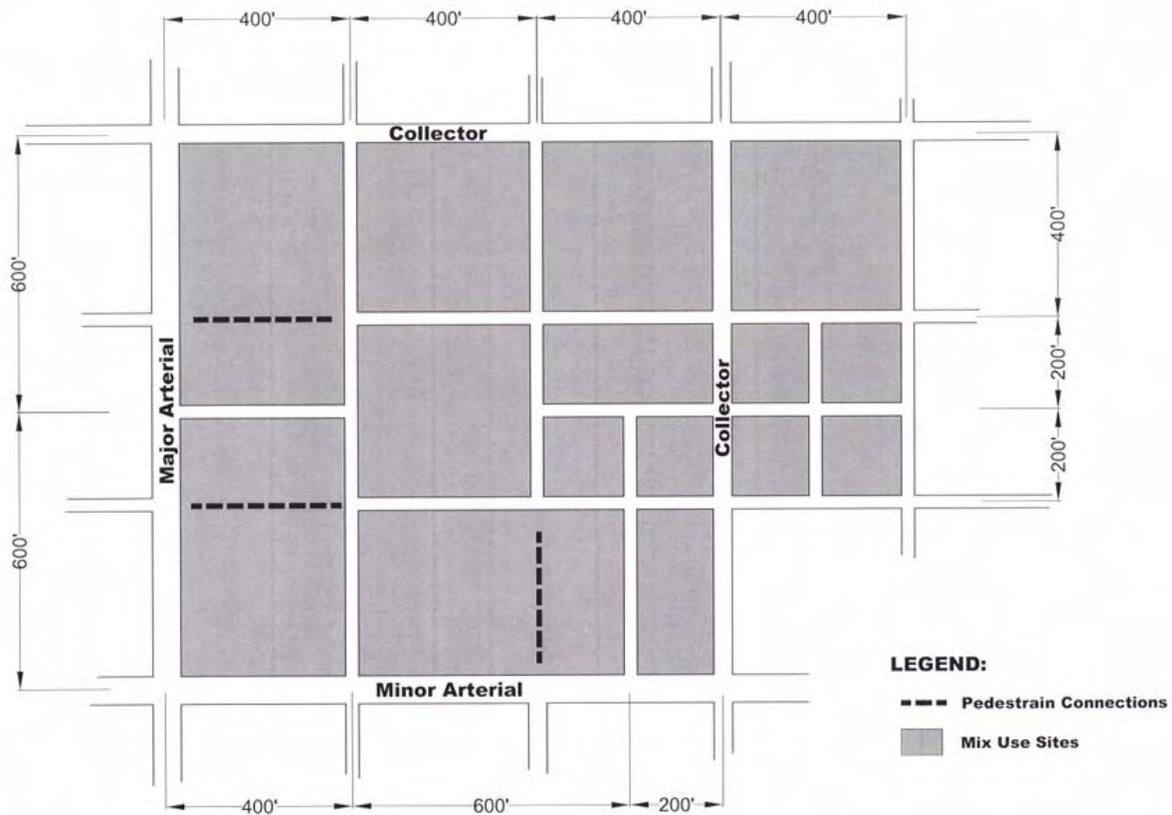


Figure IV.5– Block standards

feet, a mid-block pedestrian passthrough (Figure IV.6) shall be provided connecting opposite sides of block faces.

6. An applicant may submit alternative block standards, provided that such alternative achieves the intent of the above standards and the procedures and criteria of § 7.3.708(C) – Alternative Compliance.

Guidelines

1. An enhanced drive aisle should be used to frame block frontages that consist entirely of surface parking areas.
2. For blocks that contain non-residential uses, mid-block through-alleys are encouraged to enable secondary vehicle access.
3. A block is defined as a tract of land bounded by streets, or a combination of streets and public parks, cemeteries, railroad right of way, shorelines of waterways, or boundary lines of municipalities.

Building Entrance Orientation Standard (7.4.1204)

All buildings shall have at least one building entrance



Figure IV.6– Mid-block passthrough

oriented toward an abutting internal or perimeter street with on-street parking, or toward an on-site pedestrian walkway connected to a public sidewalk.

Guidelines

1. The primary public entry to the building should be visually obvious and emphasized through the use of such architectural treatments as differing colors or materials, arches or arcades.
2. A building adjacent to on-street parking should have an entry on that side.
3. A building adjacent to an internal street or perimeter street with a sidewalk should have an entry on that side.
4. Other building entrances may face other streets, off-street parking areas, or loading areas.
5. Building entrances should provide shade from the sun and weather protection for pedestrians. This may involve overhangs that are at least 48 inches deep, arcades, roofs, porches, alcoves, porticos, awnings, or any combination of these features (Figure IV.7).
6. When a building has frontage on more than one street, it should have an entrance on each frontage;
7. When a building is located on the corner of a block, it should have an entry at the corresponding corner of the structure (Figure IV.8).

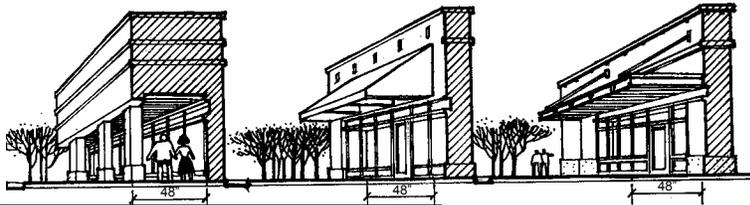


Figure IV.7— Overhang examples

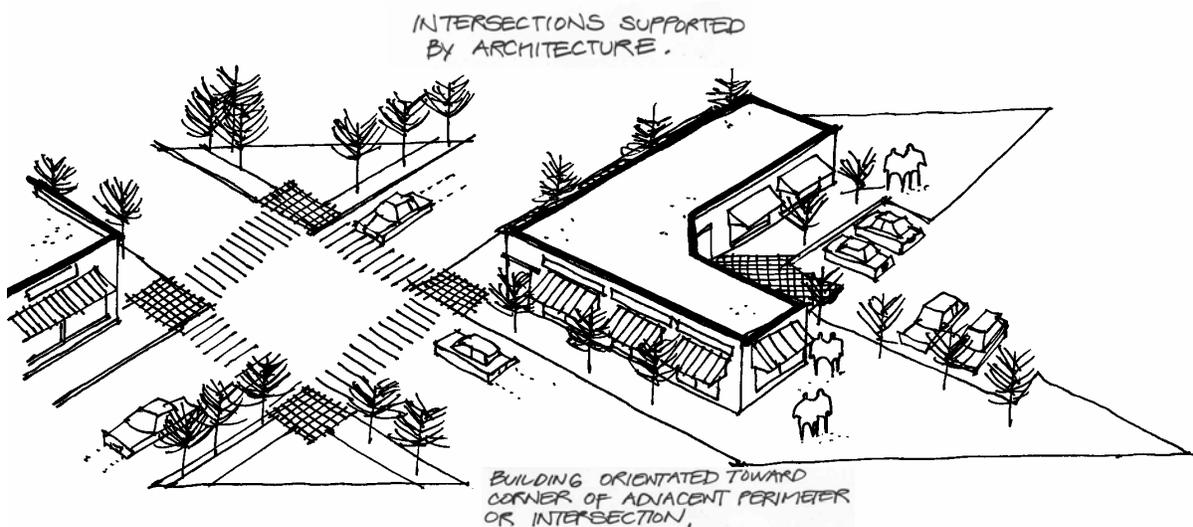


Figure IV.8— Building orientation

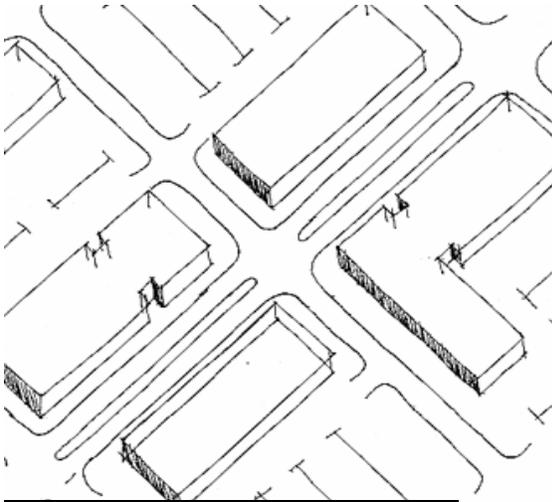


Figure IV.9– Buildings oriented towards spine street

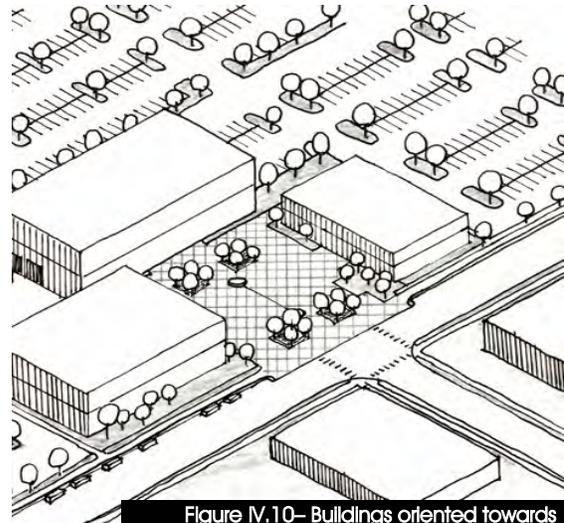


Figure IV.10– Buildings oriented towards plaza

Site Design For Multiple Building Developments

Standard (7.4.1205)

All buildings shall be arranged and grouped so that their primary orientation complements adjacent, existing development, as applicable, and is consistent with one of the following site layouts:

- Buildings orient toward, frame and enclose a main pedestrian and/or vehicle access corridor within the development site, including an entry/spine street (Figure IV.9); or
- Buildings orient toward, frame and enclose on at least three sides, parking areas, public spaces or other on-site amenities (Figure IV.10); or
- Buildings orient toward and frame the corner of a perimeter or internal street intersection (Figure IV.11); or
- Buildings orient to adjoining development, respecting adjoining exterior street alignment(s) (Figure IV.12).

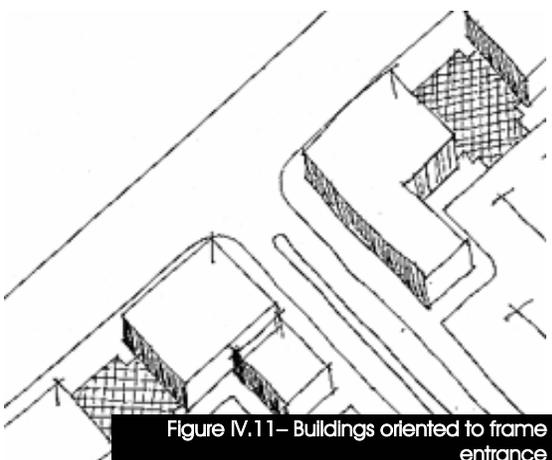


Figure IV.11– Buildings oriented to frame entrance

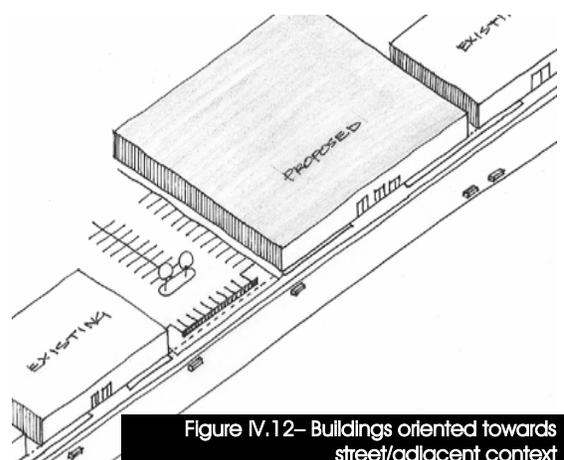


Figure IV.12– Buildings oriented towards street/adjacent context

An applicant may submit an alternative site layout and building orientation pattern, provided such pattern achieves the intent of the above standards. Strictly linear or strip commercial development patterns are prohibited.

Building And Streetscape Design Standards (7.4.1206)

1. Building Design: All building facades (Figure IV.13) that face a public street other than an alley, or face a plaza or other public space, or contain the building's primary customer or user entrance, shall be designed according to the following standards. As applicable, such features shall be applied, at a minimum, to the first fifteen (15) vertical feet of building façade.

a. For every thirty feet (30') of building façade length, the building shall incorporate modulated and articulated building wall planes through use of:

- Projections, recesses and reveals expressing structural bays or other aspects of the façade, with a minimum change of plane of six inches (6"); and
- Changes in color or graphical patterns, changes in texture, or changes in building material.

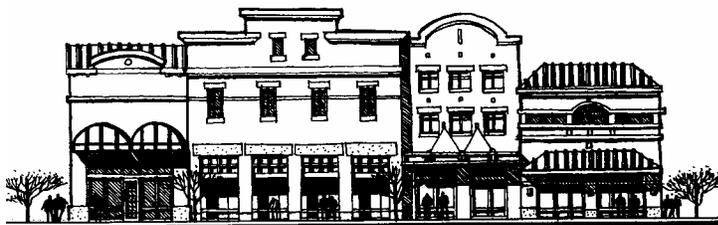


Figure IV.13– Changes of plane, color, material and form

b. A continuous pedestrian walkway extending across the full length of the building façade shall be provided. Walkways shall be at least six feet (6') wide.

2. Building Entrance Design: The primary public entry to the building shall be clearly defined, and building entrances shall incorporate elements that provide shade from the sun and weather protection for pedestrians.

Guidelines

1. Site Layout & Building Orientation: Buildings should be arranged and grouped so that their primary orientation complements adjacent, existing development, where applicable.

The pattern of building location should be consistent with one of the following site layouts. The site layouts below are stated in preferential order when proposed for the new and developing contextual area of the city:

- Buildings should orient toward and frame, or enclose a main pedestrian and/or vehicle access corridor within the development site (such as an Entry or Spine Street) (Figure IV.14);



Figure IV.14– Buildings oriented towards entry street

- Buildings should orient toward, frame and enclose on at least three sides, parking areas, public spaces, or other on-site amenities;
 - Buildings orient toward and frame the corner(s) where a perimeter street intersects with an Entry or Spine Street.
2. **Build-to-Lines:** To encourage pedestrian-friendly streets by bringing buildings close to pedestrian sidewalks and ways, the City encourages principal, non-residential buildings to be built to the back edge of the public sidewalk (0 foot build-to line) except as necessary to allow room for outdoor seating and service areas, outdoor sales and displays, landscaping, entryways, and similar pedestrian and customer amenities. The build-to area between the front property line and the front building wall of residential structures may be used to provide space for privacy, landscaping, private courtyards/open areas/entryways, and similar amenities.
3. **“T” Intersections:** The terminus of an intersecting internal street or the main enhanced drive aisle through a parking area that meets a block at a “T” intersection should be located at approximately the mid-point of the block. It should create a focal point (Figure IV.15).

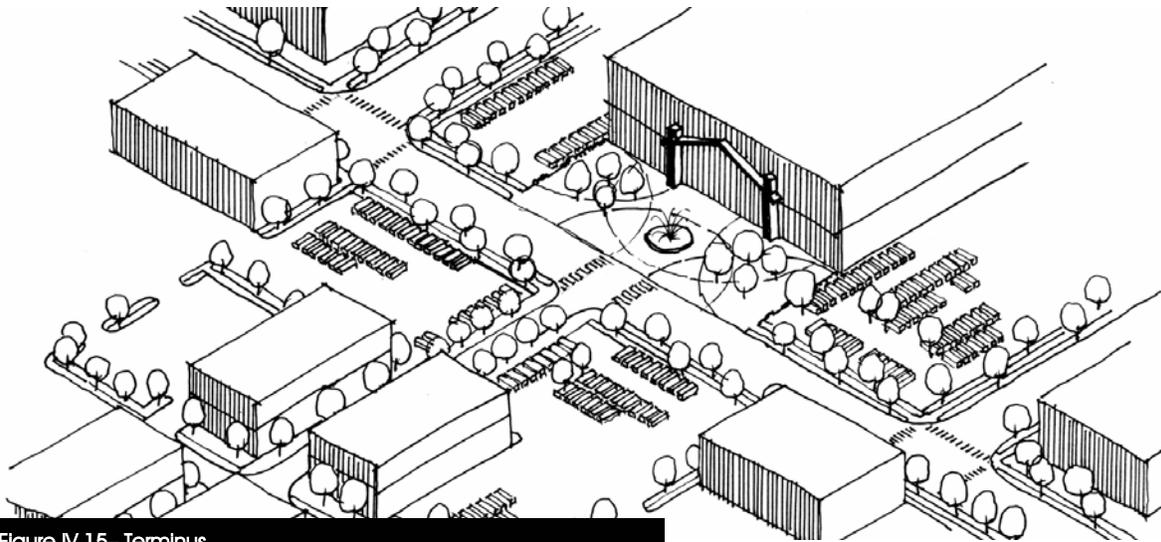


Figure IV.15– Terminus

Buildings Guidelines

1. **Visual Interest and Compatibility:** New buildings should create visual interest in ways that are compatible with the architectural character of the surrounding area. This may be accomplished through the use of such elements as similar rooflines, materials, colors, fenestration, and other architectural details.

2. Texture and Relief: All buildings should create texture and relief in facades and should avoid large, flat, unbroken, wall planes (Figure IV.16). They should take advantage of the sun to highlight changes in plane, material, and detail, using light and shadow.

3. Human Scale Detailing: Facades of buildings that

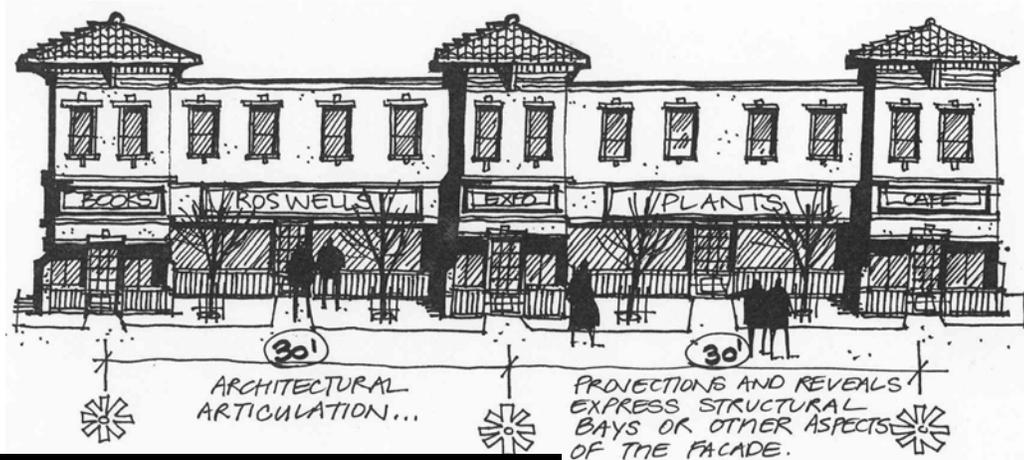


Figure IV.16– Articulation of block face

face the street should incorporate human-scale detailing through the use of reveals, belt courses, cornices, expression of structural or architectural bays, recessed windows or doors, material or material module changes, color and/or texture differences, or strongly expressed mullions.

4. Weather protection elements should be complementary to the building’s design and the design of contiguous weather protection elements on adjoining buildings. Materials and design should be durable and permanent.

5. The horizontal length of the façade of the ground floor of buildings should include awnings, transparent display windows, entry awnings, or other similar pedestrian-friendly features (Figure IV.17).

6. Each building housing a principal nonresidential use should incorporate at least two (2) of the following additional features on all building facades facing a public street, public plaza, or public open space:

- Arcades;
- Arbors;
- Contrasting building materials or textures;
- Incorporation of street furniture at the ground floor;
- Incorporation of outdoor eating or seating areas at the ground floor;
- Variations in rooflines along a single block face; or



Figure IV.17– Pedestrian-friendly facade

- Transparent windows that allow views into and out of the building; black, mirrored, or other opaque surfaces should never be used.

Large Format Buildings

Guidelines

1. Any large-format building should incorporate either an on-site amenity (e.g., a plaza or public art installation), a visually interesting architectural feature (e.g., a fountain or clock tower), or some other similarly visually interesting feature or building element.
2. A large-format building should be located at approximately the mid-block at the street terminus point.
3. A “wrap” of smaller-scale retail, service, or other commercial uses around at least one side of the large-format building’s ground floor exterior is encouraged.

Mid-Block Pedestrian Passthroughs

Guidelines

1. A mid-block pedestrian pass-through or galleria, for blocks larger than 400’, should be lighted and designed to be safe and visually interesting for pedestrians, incorporating such features as display windows or artwork.
2. Mid-block pedestrian pass-throughs should be designed so they cannot be enclosed or locked.
3. The pedestrian passthrough should be used to connect separate buildings, or link customer parking to the front of buildings (Figure IV.18).

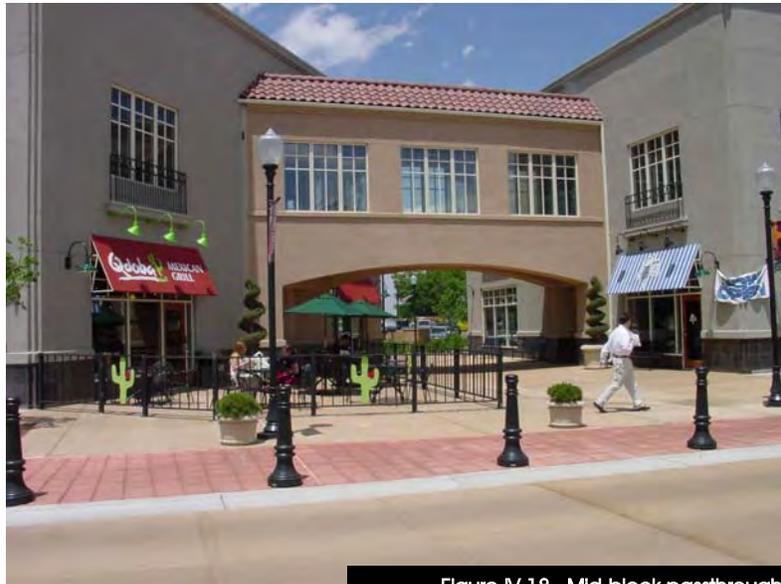


Figure IV.18—Mid-block passthrough

Street System Design

Purpose

This part is intended to provide safe, efficient, and convenient vehicular access and circulation for all development in MU zone districts, and to ensure that streets in MU zone districts have a high level of connectivity, both within the development and with adjacent street systems. Street systems will be designed to accommodate pedestrians, bicycles, and transit facilities, as well as vehicles by providing safe access via entry streets and driveways, circulation and connectivity through internal streets and blocks, connec-



Figure IV.19—Enhanced access aligned with surrounding context

tions from internal streets to external streets, and drive aisles for safe and efficient access to parking areas (Figure IV.19).

Mixed Use Vehicle Access, Circulation, and Connectivity Standards (7.4.903)

1. Vehicle access, circulation, and connectivity for development in all MU zone districts shall be governed by the street standards for mixed use centers as set forth in the *Mixed Use Development Design Manual* and the *Subdivision Policy and Public Works Design Manual*. See the "Street Standards" section below.

2. Vehicle Access: Primary vehicle access to MU zone districts shall be provided from perimeter arterial streets and from perimeter collector streets. Vehicle access from surrounding residential areas and adjacent neighborhoods shall be provided via perimeter collector streets and adjacent local streets.

3. Within a MU zone district, cross access easements are required whenever necessary to ensure that adjacent parcels have adequate access to accommodate existing or future ownership patterns.

4. Enhanced Drive Aisles: Where the entire frontage along an internal block face consists of a parking area, an enhanced drive aisle may be utilized in lieu of a street to provide access to the parking area and circulation along the block face. Enhanced drive aisles shall be designed according to the standards and guidelines in the *Mixed Use Development Design Manual*.

5. Block Structure: Development in MU zone districts shall be based on a block structure consistent with § 7.4.1203 in order to provide connectivity both within the mixed use development and with adjacent street systems.

6. Street Connections: Internal streets in MU zone districts shall be aligned to connect with existing or planned external streets of equivalent functional classification in order to create through street connections from mixed use development to adjacent development. Where it is necessary to prevent cut-through traffic from entering residential areas, street alignments shall be discontinuous and traffic calming improvements shall be utilized.

7. General Circulation Standard: For all new MU development on sites that are four (4) acres or more in total gross land area, internal circulation shall be provided through an internal street system and multiple blocks.

8. Street System: Internal streets provided according to this section may be public or private. All public

and private streets in MU zone districts shall be designed and constructed according to the policies, standards, and guidelines governing street design in MU zone districts in the *Mixed Use Development Design Manual* and the *Subdivision Policy and Public Works Design Manual*.



Figure IV.20– Pedestrian friendly streetscape

C. Pedestrian and Bicycle Access, Circulation and Connections

Introduction

Pedestrian friendly design is integral to efficient circulation in a mixed use development (Figures IV.20 & 21). Mixed use center visitors and residents should be encouraged to walk via a carefully designed, safe and enjoyable network of sidewalks and walkways. Easy, reasonably direct access should be provided to buildings and amenities, as well as to parking, transit and bike paths. There should be frequent, well placed connections to adjacent land uses to encourage neighbors to use alternative means of transportation to visit the center. Pedestrian crosswalks should be designed so that pedestrians are as safe as possible. Development of appropriately designed crosswalks is encouraged for the safety and convenience of pedestrian street-crossings. The goal overall is to place at least as much emphasis on alternative modes of transportation as on auto access.



Figure IV.21– Pedestrian access

Purpose

These standards are intended to ensure a safe and convenient system of well-connected pedestrian ways and bikeways. These facilities shall be designed to link MU developments with adjacent uses, including residential areas, shopping, employment centers, recreational facilities, open space, parks, transit stops, and schools. Within individual developments, safe and convenient pedestrian and bikeway systems shall be provided that directly connect buildings, parking areas, open space, transit stops, services, on-site amenities, and other areas of interest.

General Pedestrian And Bicycle Access And Circulation Standard

All new development shall provide and contribute to an on-site system of pedestrian walkways, sidewalks, and bikeways that provide continuous access to all land uses within a development site and to land uses on adjacent properties, according to the following standards. For additional design details, the City's *Subdivision Policy and Public Works Design Manual* shall be consulted.

Connectivity Standards (7.4.703.A)

All new development shall provide pedestrian and bicycle systems that provide continuous connections with off-site destinations according to the following standards:

1. Safe and convenient bicycle and pedestrian access from the development site shall be provided to existing and designated public bike paths or greenways located on or adjacent to the development site.
2. Connections shall be made to provide direct pedestrian and bicycle travel from within the development to adjacent uses, transit stops, perimeter sidewalks, and to major pedestrian destinations located within an adjacent neighborhood. Pedestrian access shall be provided by connection to any sidewalks or walkways on adjacent properties that extend to the boundaries shared with the development site (Figure IV.22). In order to provide efficient pedestrian connections to adjacent destinations, the City may require additional sidewalks, walkways, or bike paths not associated with a street, or the extension of a sidewalk from the end of a cul-de-sac to another street or walkway.
3. Where a MU zone district is located adjacent to a signalized street intersection, a pedestrian walkway shall connect the on-site pedestrian system with the intersection and shall be connected at a distance of no more than two hundred (200) feet from the intersection. The Planning Director may grant an exception where there are no existing or planned perimeter sidewalks.
4. Connections from a perimeter public sidewalk system to the on-site sidewalks shall be made at the same block length interval as exists within the development site.

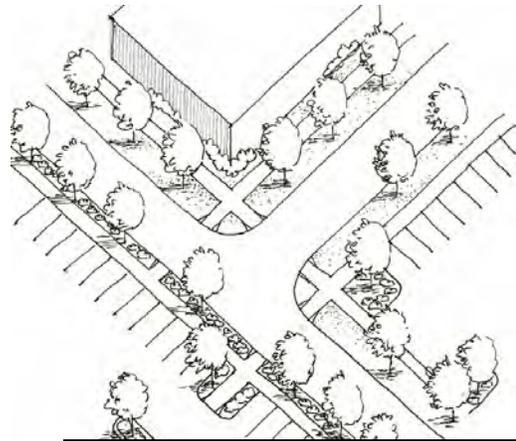


Figure IV.22—Sidewalk system connections

Guidelines

1. The intent for perimeter connections is that they be frequent and consistent with the internal (and if possible external) block pattern. For example, if a 400-foot block face exists internally, the same should apply to connect to the external walkway system.

2. When necessary to assure the public's safety in using on-site or connecting pedestrian and bike ways, the City may require the developer to provide on-site or off-site pedestrian and/or bicycle overpasses, underpasses, transit stops or traffic signalization.

Internal Pedestrian Circulation and Connections

Standards (7.4.703.B.)

1. Required Connections. Each development shall provide an on-site system of pedestrian walkways and/or public sidewalks throughout the zone district (Figure IV.23). The on-site pedestrian circulation system shall provide the most efficient access route between the intended points of travel. Specifically, on-site pedestrian connections shall be provided to and between the following points:

- The primary entrance or entrances to each building housing a principal use;
- Existing or planned transit stops, stations, and park-n-ride locations;
- Greenways or trail systems, where determined appropriate either by the City Parks, Recreation and Cultural Services Director, based on the *Parks, Recreation & Trails Master Plan*, or by the Planning Director, based on the *Intermodal Transportation Plan*; and
- On-site amenities, as provided according to § 7.4.1001.

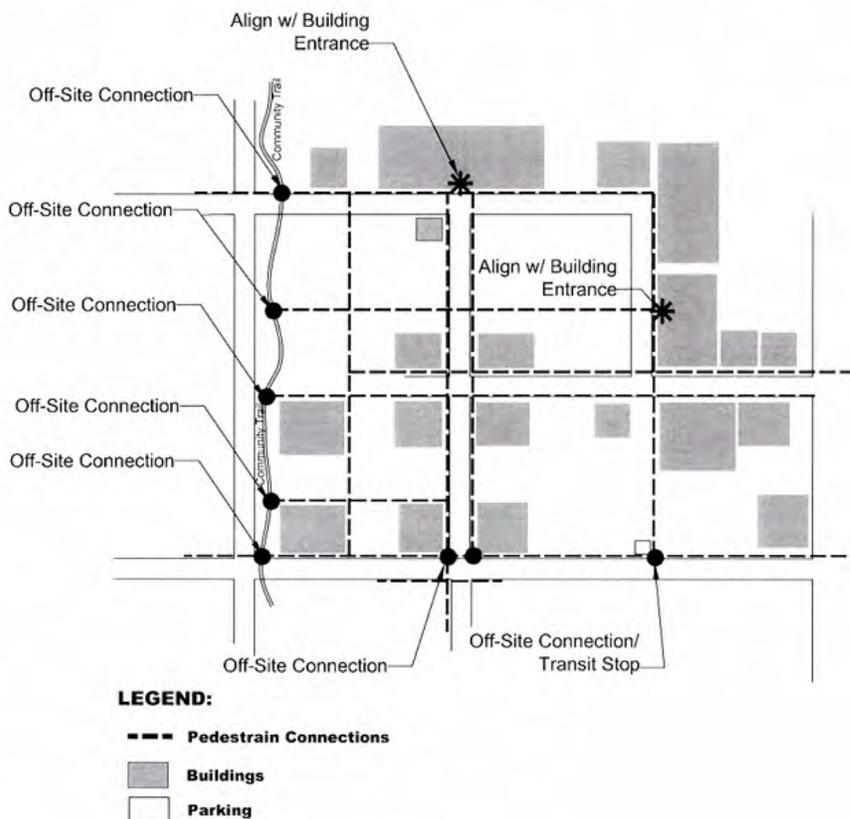


Figure IV.23– Pedestrian system

Guideline

It is important to create a pedestrian walkway system that provides direct linkages with primary destinations (Figure IV.24), otherwise alternative means of access will be used, such as short cuts through parking lots, or driving. Sidewalks and walkways should be planned early in the site design process and given a high priority, so that access is provided as efficiently as is reasonable, to destinations within and outside the site.



Figure IV.24– Primary destination link

Connections to On-Site Parking Standards (7.4.703.B)

1. All developments served by on-site parking in surface lots or parking structures shall provide either a sidewalk along the perimeter of the block or a designated pedestrian walkways through the parking lot, extending from the rows of parking furthest from the building served to either a building entrance or to a sidewalk or walkway leading to such entrance (Figure IV.25). A minimum of one (1) connecting walkway or sidewalk shall be provided for every four hundred

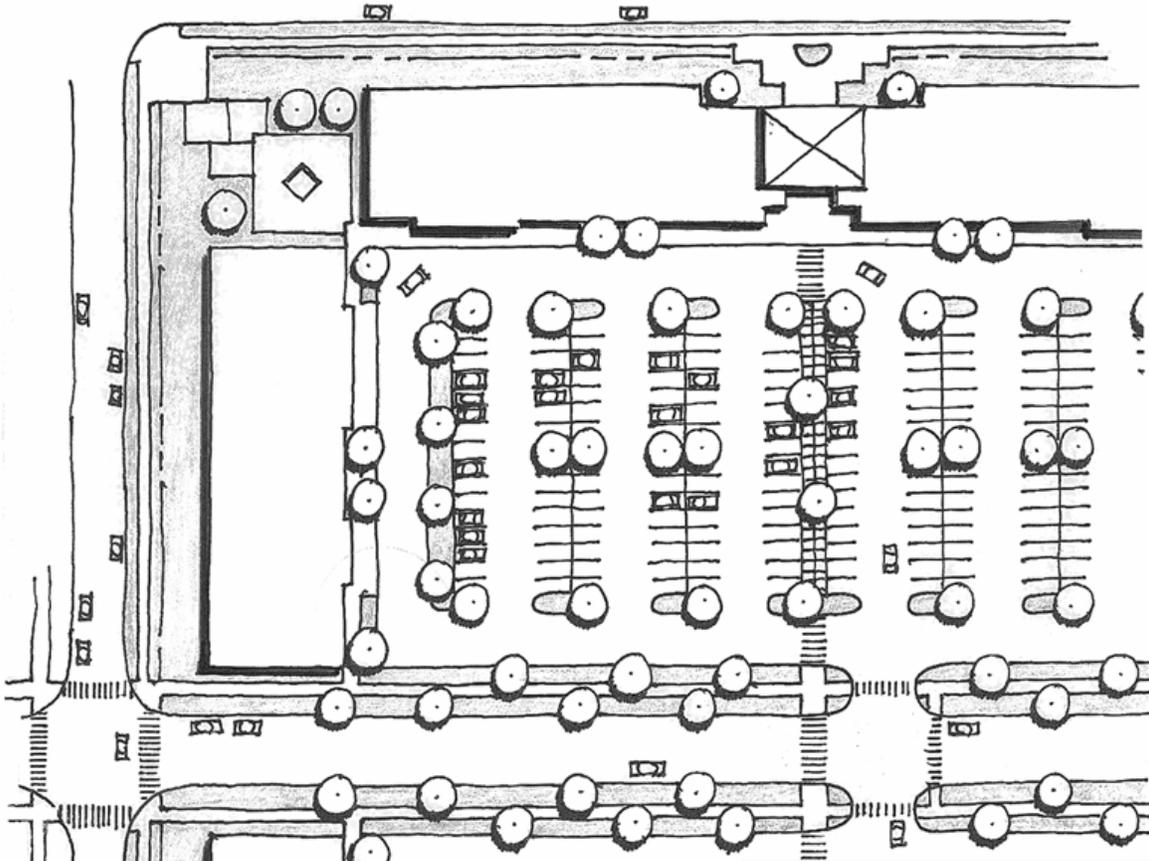


Figure IV.25– Pedestrian connections

(400) lineal feet of vehicle parking area.

2. Where an internal block face exists or is proposed greater than four hundred feet (400'), a pedestrian walkway shall be included through the parking lot, separate from streets, such that the four hundred foot (400') minimum distance between walkways is achieved. Alternative compliance may be allowed as described in § 7.3.708(C).

3. Where an enhanced drive aisle forms the perimeter of a block, sidewalks shall be provided on both sides of the drive aisle (Figure IV.28).



Figure IV.26— Pedestrian way through parking lot



Figure IV.27— Pedestrian connection through parking lot



Figure IV.28— Walkway along drive aisle

Walkway Design Standards (7.4.703.C)

1. All on-site pedestrian walkways shall have and maintain a minimum unobstructed width of six feet (6'), except that walkways for both pedestrian and bike use shall provide an unobstructed minimum pathway width of twelve feet (12'). Pedestrian walkways through parking areas shall be at least seven feet (7') wide, unless concrete wheel stops, bollards, curbing, landscaping, or other similar improvements are provided that prevent parked vehicles from obstructing the walkway. Pedestrian and bicycle pathways connecting to greenways or trail systems are subject to standards in the City's *Parks, Recreation & Trails Master Plan*.

2. Walkways shall be designed to create a safe and uninterrupted pedestrian way, and shall avoid frequent crossings by driveways or streets. Walkways shall be separated from streets and parking lots by curbs or other means to create physical separation.

Guideline

Walkways should provide relief from the paved expanses of parking lots and streets. A way to do this is to design pedestrian walkways as amenity areas with landscaping, benches, lighting, signage and attractive street furniture (Figure IV.30).

Pedestrian Passthroughs Standards (7.4.703.D)

1. Where a block face is greater than four hundred (400) feet, pedestrian access shall be provided through the block or building(s) at a distance no greater than four hundred (400) feet. The pedestrian passthrough (Figure IV.31) must stay open, regardless of whether businesses are open or closed.

2. Alternative compliance may be allowed as described in § 7.3.708(C). The Planning Director may waive the requirement for pedestrian passthroughs in cases where there is limited viability for pedestrian access such as adjacency to an expressway or freeway.

3. Alleys and service areas shall not be considered to be pedestrian passthroughs, although alleys may be designed with pedestrian walkways.

Sidewalks Standard (7.4.703.E)

All sidewalks adjacent to public or private streets shall be designed and constructed according to the policies, standards, and guidelines stated in the City's *Subdivision Policy and Public Works Design Manual*.



Figure IV.29– Continuous walkway through drive aisles islands



Figure IV.30– Walkway as amenity



Figure IV.31– Pedestrian passthrough

Sidewalks shall be provided on both sides of all streets except alleys.

Street Crossings
Standard (7.4.703.F)

All pedestrian street crossings shall comply with the applicable policies, standards, and guidelines governing street crossings in MU developments in the City, as stated in the City's *Subdivision Policy and Public Works Design Manual*.

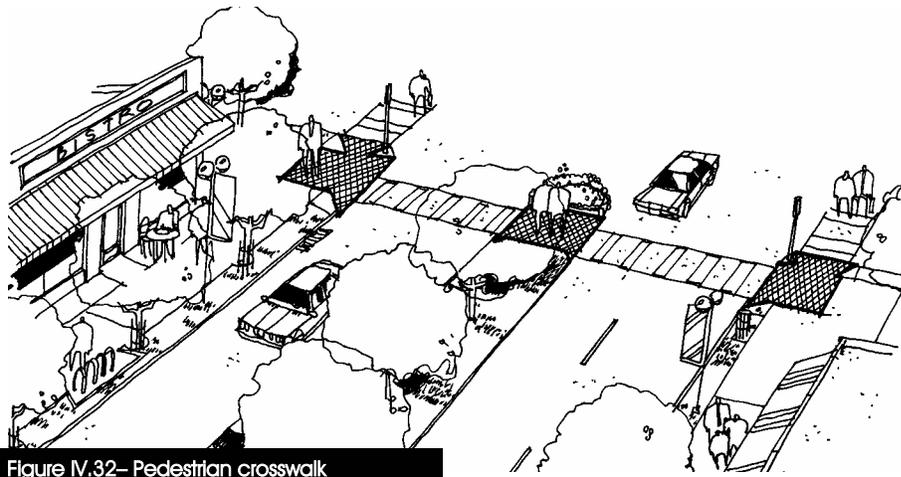


Figure IV.32– Pedestrian crosswalk

Guideline

Pedestrian crosswalks across major streets should be signalized and developed with a different treatment in the crosswalk to differentiate it from the street paving and parking areas and emphasize the presence of a crosswalk (Figure IV.32). Mid-block crossings, where necessary for good access, should

include similar design characteristics. See the "Street Standards" section.

Security
Guideline

Walkways should be well lit and constructed to provide an unobstructed line-of-sight to other pedestrians, motor vehicles, and other site users. See sections 7.4.102.(D) and 7.4.702 of the Zoning Code.

D. On-Site Amenities

Introduction

An attractive public realm is a fundamental ingredient in the success of a mixed use development. Open air and semi-enclosed public gathering spaces can act as central organizing elements in a mixed use center. They can also help to shape the relationship between different uses and provide focal points and anchors for pedestrian activity. On-site amenities can create a strong image and unique character for a mixed use development, making it a special place for the community, instead of just a project.

Purpose

This part is intended to create outdoor, on-site amenities and gathering places (Figure IV.33). Such amenities and places provide desirable open space, create an inviting image for customers, visitors, and employees, enhance the pedestrian environment and streetscape, offer attractive spaces for people to gather, interact, rest, shop, and eat, and contribute to the character of the City.

Provision of On-site Amenities Standards (7.4.1003)

All development shall incorporate at least two (2) of the following on-site amenities or features as highly visible, easily accessible, outdoor focal points or gathering places for residents, employees, and visitors to the development site:

1. Patio or plaza with seating areas, provided such patio or plaza has a minimum depth and width of ten (10) feet, and a minimum total area of three hundred (300) square feet (Figure IV.34).
 - a. Asphalt is prohibited as a paver; use of decorative pavers or textured, colored concrete is required.
 - b. Patios and plazas shall include pedestrian amenities intended to support these places as gathering areas.
2. Landscaped mini-parks, squares, or greens, provided such park or green has a minimum depth and width of ten (10) feet and a minimum total area of six hundred fifty (650) square feet, and shall include pedestrian amenities intended to support these places as gathering areas (Figure IV.35).



Figure IV.33– Site amenities



Figure IV.34– Plaza with seating



Figure IV.35– Mini-park



Figure IV.36—Buildings frame site amenity

3. Protected customer walkways, arcades, or easily identifiable building pass-throughs containing window displays and intended for general public access.
4. Water feature, such as a lake, pond, or fountain, provided the feature is easily accessed by pedestrians and includes or integrates seating areas for pedestrians.
5. Outdoor public art in an area that is:
 - Visible from an adjacent public sidewalk or street, and
 - Easily accessed for viewing by pedestrians.
6. Any other, well-designed area and/or focal feature that the Planning Director finds is consistent with the intent of this subsection, substantially enhances the development and serves as a gathering place for residents, visitors, customers, and employees.

Guidelines

1. Patios, plazas, mini-parks, squares and greens should be proportionate in size to the development. Small-scale amenities are appropriate for small developments, and large-scale amenities are appropriate for large developments.
2. Temporary stormwater detention ponds should not be regarded as a water feature.
3. In order to serve as a focal point, a feature should be visible and easily recognizable as an area that encourages outdoor assembly. It may be framed by a view corridor, be placed on a high point, or be visually related to a multi-use trail or other walkway.
4. Pedestrian amenities for patios and plazas, and for landscaped mini-parks, squares or greens may include seating, lighting, special paving, planting, food and flower vendors and artwork.



Figure IV.37—Arcade

5. Special recreational features should be urban in character, proportionately sized, and not pose a safety hazard to users and visitors.

Buildings Adjacent to Outdoor Amenities Standard (7.4.1004)

Providing good public visibility of on-site outdoor amenities shall enhance the security of pedestrians (Figure IV.38). Accordingly, when a building will be adjacent to a pedestrian plaza, patio, mini-park, square or green as provided under this part, the building wall facing such outdoor amenity shall contain at least one (1) of the following elements:

- A building entry;
- Windows facing onto the outdoor amenity;
- Arcades along the edges of the outdoor amenity (Figure IV.37);
- Outdoor seating areas; or
- A similar feature that the Planning Director finds will bolster security and encourage pedestrian use of the outdoor amenity.



Figure IV.38—Visibility of site amenities

Maintenance Standard

The property owner shall be responsible for the continued maintenance and repair of all on-site amenities provided according to this part.

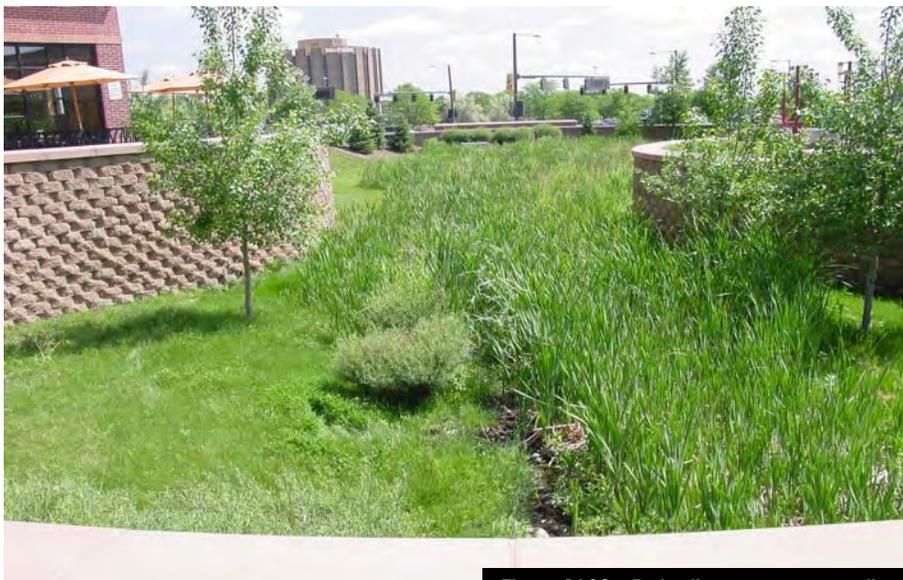


Figure IV.39—Detention area as amenity

E. Parking

Introduction

Parking poses one of the most difficult challenges for the design of mixed use developments. Surface parking requirements can make it the largest user of land in a mixed use center, with significant impacts on overall layout, image, and marketability. Parking quantities, access, placement, and design must work for the users of a center, as drivers, pedestrians and as bicyclists. Parking must also meet the needs of all the uses mixed on the site, both primary and secondary. There are a number of strategies and techniques that can be used to meet these challenges. They include realistic assessments of demand, maximizing opportunities for shared parking and on-street parking, providing easy access via transit, on foot, and by bicycle, designing efficient and direct access to parking areas, incorporating structured parking into the overall project design whenever feasible, breaking up parking areas with walkways and landscaping, and using the ground level space in parking structures to support the pedestrian environment.

Purpose

The purpose of this part is to ensure the provision, location, and design of off-street parking areas that accommodate motor vehicles while balancing the needs of pedestrians, bicyclists, and transit users with the use of the automobile. Parking areas are secondary to and supportive of the primary land uses on the site.

Off-Street Parking Standards (7.4.230)

Minimum off-street parking amounts required for uses in mixed use zone districts are subject to the additional parking allowances and standards displayed in the following table by use type. The maximum amount of off-street surface parking permitted for all uses in a MU zone district shall be one (1) space per one hundred, seventy five (175) square feet of gross floor area. For a full listing of the minimum off-street parking requirements for specific uses in all zone districts, including mixed use, see §7.4.203 of the Zoning Code.

Minimum Off-street Parking Requirements for Specific Uses

Use Type	Minimum Required Off-Street Parking Spaces within a Mixed Use Zone District.
Residential Use Types	Per Standards in 7.4.203
Accessory Dwelling Unit	1 space per dwelling unit
Live/Work Structure Residential Portion Only	1 space per dwelling unit
Nonresidential Portion Only	The lesser of: 1. 1 space per 300 square feet; or 2. 1 space for each non-resident employee.
Commercial Use Types	1 space per 300 square feet
Civic Use Types	1 space per 300 square feet
Industrial Use Types	1 space per 300 square feet
Transportation Use Types	1 space per 300 square feet

Supplemental Parking Standards (7.4.203.G)

The following parking standards shall be applicable to all development within a MU zone district:

1. On-Street Parking — General:

The Planning Director may allow on-street parking spaces located within four hundred (400) feet of the subject use (Figure IV.37) to be credited to meet up to twenty-five percent (25%) of the minimum required off-street parking spaces. On-street parking allowed by this provision shall not be counted toward the maximum amount of parking allowed. This provision shall not apply when a new MU zone district is created within an Older/Established Contextual Area, unless the district includes newly created public streets that can accommodate on-street parking or where it can be demonstrated through a parking utilization study that the existing on-street capacity on adjacent streets is underutilized.

2. Credit Reductions

The Planning Director may reduce the minimum off-street parking requirements by up to fifteen percent (15%) for MU developments meeting at least one of the following requirements:

- The development is sited within one-quarter ($\frac{1}{4}$) mile of a high-frequency transit station or terminal.
- The development is sited within one-quarter ($\frac{1}{4}$) mile of the downtown core, as defined in § 7.4.406(l)(6).



Figure IV.40– On-street parking

3. Maximum Off-Street Parking Amount.

The maximum amount of off-street parking permitted for all uses in a MU zone district shall be one (1) space per one hundred, seventy five (175) square feet of gross floor area.

4. Exemption for Off-Street Parking in Structures

Required off-street parking spaces provided within a parking structure (either above or below-grade) shall be exempt from the maximum off-street parking amount established above.

5. Shared Parking Standards

The amount of off-street parking required for a MU development may be reduced by an amount determined by the Planning Director when it can be demonstrated through a parking demand study that sufficient parking is or can be met by the subject uses through shared parking. The parking demand study shall provide information and evidence about the anticipated parking demand at peak times during a day and the distance relationship between available shared parking spaces and the specific uses served.

6. Shared Parking Required

To promote an overall reduction in parking, the use of shared parking shall be required when the development is under the control of a single owner/developer and contains commercial, retail, office, institutional, or public uses with staggered peak parking demands.

7. Shared Parking and Cross Access Agreements

Where shared parking is provided, a shared parking and cross access agreement between the cooperating property owners shall be approved by the Planning Director and recorded prior to issuance of a building permit. This agreement must be recorded as a deed restriction on both properties and cannot be modified or revoked without the consent of the Planning Director. If any requirements for shared parking are violated, the affected property owners must provide a remedy satisfactory to the Planning Director or provide the full amount of required parking for each use, in accord with the requirements of this part.

8. Maximum Total Reductions

Total cumulative reductions to the minimum off-street parking requirements shall not exceed twenty-five percent (25%).

Supplemental Parking Guidelines

1. Shared Parking Encouraged

The use of shared parking is strongly encouraged to reduce overall parking amounts for the following types of mixed-use developments:

- Residential uses in close proximity to complementary uses, such as residential adjacent to grocery stores or office uses, or uses in vertical mixed use buildings, and
- Land uses with staggered peak parking demands when the individual uses are not under the control of a single owner/developer.

2. Repair Bays

Within an automobile service station, repair garage, or other similar use repair bays should not be counted as part of the required off-street parking spaces.

3. Drive-up Restaurant Parking

For restaurant types in which food is ordered from, delivered to and consumed within a vehicle, the parking requirements should be based upon the gross floor area of the building in which the food is prepared as well as the area of the parking stalls designed to accommodate in vehicle food consumption.

Parking Location and Layout

Purpose

The purpose of these standards is to ensure that the location and design of off-street parking areas balance the needs of pedestrians and transit users with use of the automobile on the site. The location and layout of parking areas should support the pedestrian environment as well as contribute to efficient automobile access and circulation.

On-site, Off-Street Surface Parking Standards (7.4.205.S)

Off-street surface parking provided on-site for development within a MU zone district shall be located according to the following standards:

1. Off-street, surface parking areas shall be located at the side, to the rear, or at the face of a building that does not front along a street (Figure IV.41). No off-street parking shall be located between a building and the adjacent street frontage.

2. All off-street surface parking areas shall be located within a designated block. For block faces that are

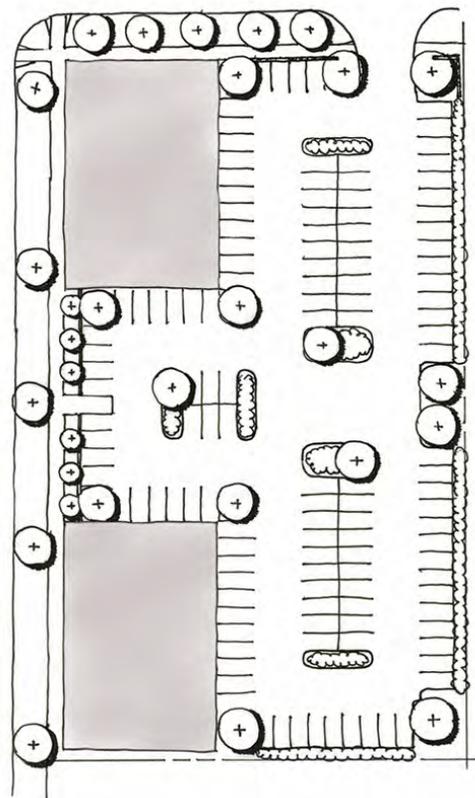


Figure IV.41— Typical off-street parking

composed entirely of surface parking lot areas, a street or enhanced drive aisle (Figure IV.44) that provides a detached sidewalk, defined pedestrian crossings, and street or parking lot trees along the block face shall border the block face.

Guidelines

Off-street surface parking areas that serve buildings fronting on an entry/spine street should be located to provide the earliest possible access to automobiles after they have entered the site (Figure IV.45).

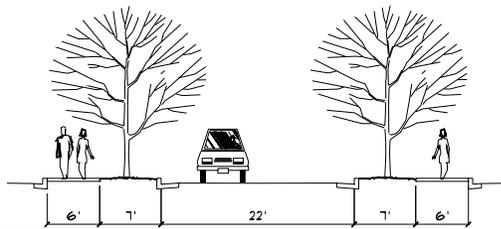


Figure IV.42– Enhanced drive aisle

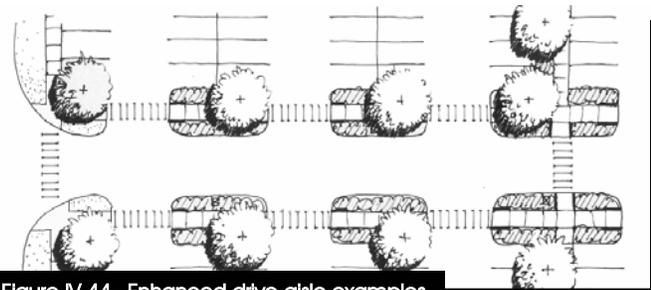
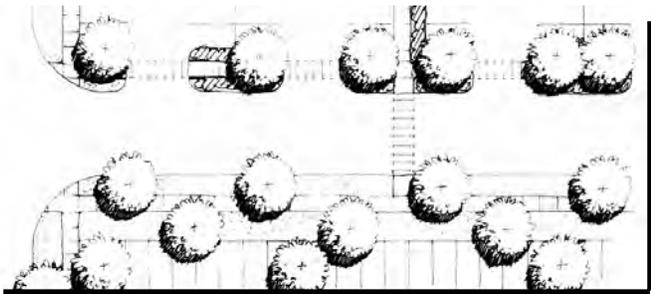
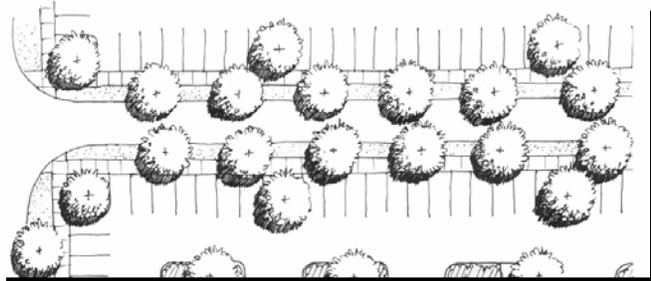


Figure IV.44– Enhanced drive aisle examples

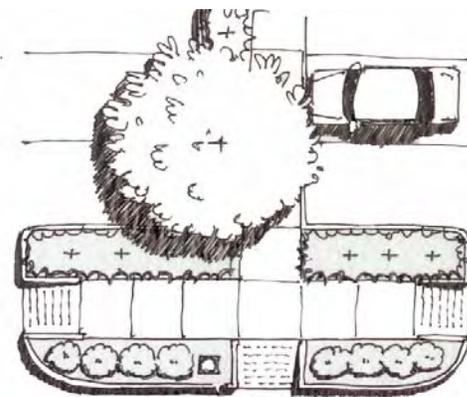


Figure IV.43– Drive Island design

Off-Site Parking in the Mixed Use Zone Districts

Standards (7.4.205.S.2)

Subject to Planning Director approval, subsequent to receipt of a professionally prepared parking study addressing how site parking demand will be met, the following standards shall apply:

1. On-street parking may be counted toward the minimum off-street parking requirements as required in § 7.4.203(A).
2. Off-site parking areas may be permitted within four hundred (400) feet of the principal use served.
3. Valet parking service is permitted for all non-residential uses.
4. Spaces available in public parking structures located within one thousand three hundred twenty (1,320) feet of the subject use may be counted toward the total amount of required off-street parking.
5. Direct, continuous pedestrian connections, using pedestrian walkways or sidewalks, shall be provided between any on-street parking, remote (off-site) parking, or public parking facilities and the use(s) served. All pedestrian connections shall comply with applicable design standards stated in article 4, part 7 of the Zoning Code.

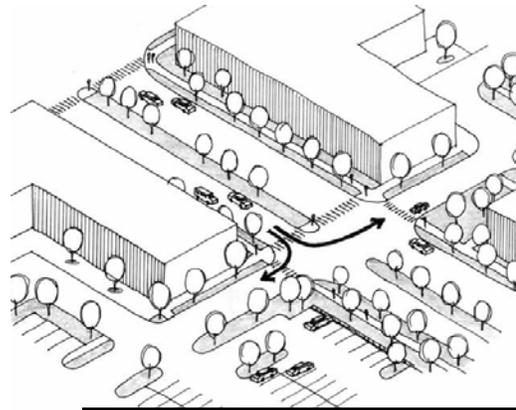


Figure IV.45– Parking access

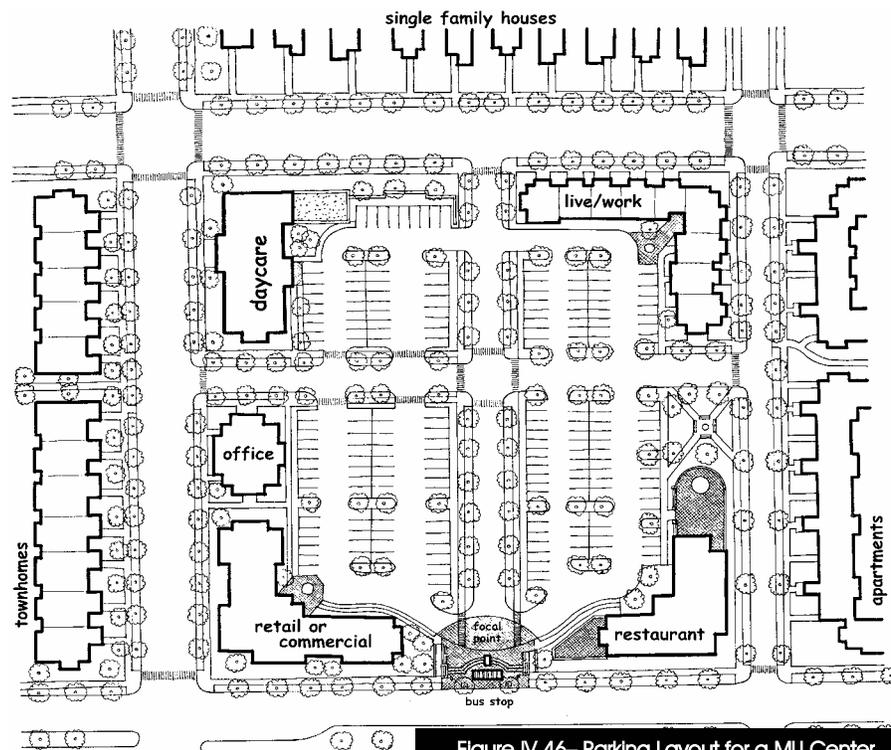


Figure IV.46– Parking Layout for a MU Center

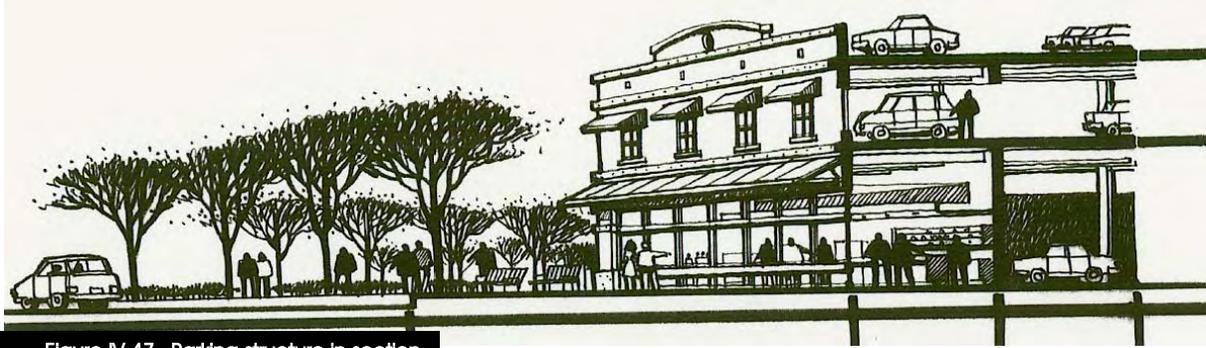


Figure IV.47– Parking structure in section

Parking Structures Standards (7.4.208)

Off-street parking facilities in above-grade structures shall comply with the following standards:

1. General Design

Parking structures shall comply with the following design standards:

- Blank walls are prohibited. Parking structures shall be visually similar in character and scale to adjacent buildings.
- Except on sides abutting an alley, all floors above the ground floor of the parking structure shall have architecturally articulated facades designed to screen the view of parked cars.

2. Design of Entries/Access

Vehicle entries to off-street parking structures shall be integrated into the placement and design of adjacent buildings or oriented away from the primary street frontage. At a minimum, parking structure facilities shall have user vehicle access from locations that minimize conflicts with pedestrian circulation.

3. Ground Floor Use and Design -- Nonresidential Parking Structures

When a parking structure provides commercial parking, or is integrated into a building containing primarily nonresidential uses, at least eighty percent (80%) of the ground floor of any side of an above-grade parking structure that is adjacent to a public street (except an alley) or adjacent to a public open space/plaza shall be constructed to an adequate depth to permit future occupancy by any commercial or other non-parking principal use allowed in the district. The ground-level facade of the structure (at least the first twelve (12) vertical feet of the structure) shall include the following features:

- Facade articulation and modulation through



Figure IV.48– Parking structure

- changes in vertical wall plane and/or a change in building material;
- Use of real windows with glazing that may be translucent, but shall not include black or mirrored glass or similar opaque glazing;
- Integration of multiple building entrances.

4. Ground Floor Use and Design -- Residential Parking Structures

When a parking structure provides parking for residential uses in the area, or when the structure is integrated into a residential building, the applicant shall either:

- a. Follow the design standard for Nonresidential Parking Structures above; or
- b. Use the ground floor of the structure for parking, provided the ground-level façade of the structure (at least the first twelve (12) vertical feet of the structure) includes at least two (2) of the following features:
 - Façade articulation and modulation through changes in vertical wall plane and/or a change in building material;
 - Use of real windows with glazing that may be translucent, but shall not include black or mirrored glass or similar opaque glazing;
 - Use of false windows defined by frames or lintels and sills;
 - Integration of multiple building entrances;
 - Buffering of the street edge with landscaping, berms, or landscaped planters.

5. Incentive for Parking Structures

Subject to approval by the Planning Director, if off-street parking is provided in a structure (above or below grade) that is integrated into the design of a building containing a principal use, the maximum building height may be increased without applicant use of the high rise overlay district. Pursuant to the administrative relief provisions in article 5, part 11, the Planning Director may increase the permitted maximum building height up to the following maximums:

Zone Districts	Maximum Permitted Building Height	Maximum Building Height Pursuant to Administrative Relief for Mixed Use
MU-CC	45 feet	65 feet
MU-R/EC	65 feet	85 feet



Figure IV.49–Bicycle parking typical location

Bicycle Parking Facilities Standards (7.4.209)

All mixed use developments shall provide bicycle parking facilities to meet the following standards:

1. Amount:

A minimum number of bicycle parking spaces shall be provided, equal to five percent (5%) of the total number of automobile parking spaces provided by the development, but not less than one (1) space.

2. Location:

Bicycle parking facilities shall be located no further than one hundred (100) feet away from a building entrance, shall be visible from the land uses they serve, and shall not be located in remote automobile parking areas. Facilities shall not be located in places that impede pedestrian or automobile traffic flow or that would cause damage to landscaping.

3. Design:

Spaces for short-term bicycle parking shall provide a means for the bicycle frame and one wheel to be attached to a permanent fixture, designed for securing bicycles, by means of a lock. The preferred design is the "inverted U" rack.

4. Off-Street Parking Space Credit for Bicycle Parking:

Off-street parking credit for bicycle parking shall comply with the following standards:

- a. When a development site is adjacent to a designated bike route, the City may reduce the required minimum number of off-street parking spaces for provision of bicycle parking by one (1) off-street vehicle space for every six (6) bicycle spaces, up to a maximum reduction of five percent (5%), and
- b. The City may reduce the required minimum number of off-street parking spaces by one (1) off-street vehicle space for every six (6) bicycle parking spaces, for on-site showers/changing rooms, or bicycle lockers, up to a maximum reduction of ten percent (10%).



Figure IV.50–Bicycle parking

F. Landscaping

Introduction

In addition to on-site amenities, landscaping in mixed use developments is applied primarily in three settings: parking lots, streetscapes and walkways, and at the edges of a site. In all three cases, a thematic approach to landscape design can enhance the pedestrian environment, unify the different elements of the project, and impart a well defined character and image.

Parking Lot Landscaping

Purpose

These standards are intended to encourage landscaped surface parking lots, including the planting of trees, that will improve the appearance of a MU development by breaking up expanses of paved areas, reduce the significant solar heat gain from parked automobiles and paved parking areas, improve the management of storm water run-off, and provide a more pedestrian-friendly environment. Except as expressly provided for in this section, parking lot landscaping shall be consistent with the *Landscape Code and Policy Manual*.

Standards

1. General Requirements

Landscaping within or adjacent to parking lots shall consist of required trees, screening vegetation or devices, and ground plane cover, and shall be subject to the following conditions and requirements:

- Except as expressly allowed by this section, landscaping outside of parking lots may not be used to meet the internal parking lot landscaping requirement.
- To meet the parking lot landscaping standards below, the tree types and minimum planter sizes shall be consistent with the *Landscape Code and Policy Manual*.
- Parking lot landscaping is also subject to the ground plane and turf requirements in § 7.4.317, and the *Landscape Code and Policy Manual*.
- An applicant may request administrative relief from the requirements of this subsection according to article 5, part 11 of the Zoning Code.

2. Pedestrian Provisions

Except as expressly waived or modified by the City in

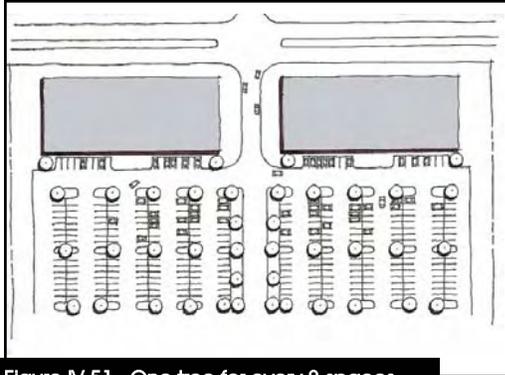


Figure IV.51—One tree for every 8 spaces

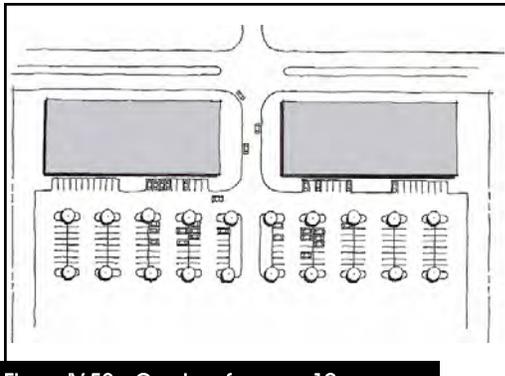


Figure IV.52—One tree for every 10 spaces

an Older/Established Contextual Area, in order to reduce the scale of large surface parking areas and make them more pedestrian-friendly, the total amount of surface parking provided shall be broken up by landscaping and pedestrian walkways according to the following standards:

- A pedestrian walkway that extends from the furthest row of parking to either a building entrance or a sidewalk leading to the entrance shall be provided for every four hundred (400) lineal feet of surface vehicle parking area as measured perpendicular to the walkway.
- Parking lot trees shall be provided as follows: at least one (1) tree for every eight (8) parking spaces for total surface parking provided at a ratio of one (1) parking space for every one hundred, seventy five (175) to two hundred (200) square feet of total gross floor area; and at least one (1) tree for every ten (10) parking spaces for total surface parking provided at a ratio of one (1) parking space for every two hundred, one (201) to three hundred (300) or more square feet of total gross floor area.
- Subject to approval by the Director of Public Works, the placement of natural, nonstructural drainage facilities in landscaped medians is allowed.

3. Design Standards for Interior Parking Lot Landscaping

Required trees for interior parking lot landscaping shall be evenly distributed throughout the parking lot to create a canopy effect in the parking lot, and shall be located to divide and break up expanses of paving and long rows of parking spaces according to the following standards:

- a. Trees shall be planted in either "island" planters that span the length of two parking spaces, or in "finger" planters that span the length of one parking space. In addition, trees may be planted in the landscaped median or alongside a pedestrian walkway.
- b. All parking rows or bays shall terminate in an "island" planter or "finger" planter.
- c. Wheel stops or similar devices shall be used as necessary to prevent damage to the trees and landscaped planters from vehicle overhang.

4. Required Parking Lot Screening

Screening requirements shall apply to both perimeter and internal streets.

- Surface parking spaces shall be screened from view (Figure IV.53) from adjacent properties and from adjacent streets to a minimum height of forty-two (42) inches by the use of berms, plantings, and/or structures.
- The maximum spacing of plants to achieve an acceptable screen and the maximum acceptable grades for screening areas such as sodded berms and planting beds shall be consistent with the *Landscape Code and Policy Manual*.

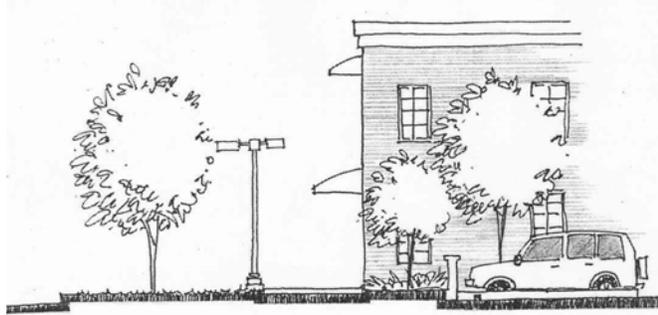


Figure IV.53—Parking lot screening

5. Use of Screening Structures In Lieu of Plantings

The use of structures such as masonry walls or ornamental fencing for streetside parking lot screening purposes shall be permitted in lieu of plantings. Structures shall be a minimum of forty-two inches (42") in height.

6. Exceptions for Infill and Redevelopment

In order to encourage infill and redevelopment on constrained sites containing no more than twenty-five (25) acres and bordered by developed land along the entire perimeter (excluding intervening public streets), the following exceptions to the parking lot landscaping requirements above are available to such infill and redevelopment occurring within an Older/Established Contextual Area:

- The Planning Director may waive up to fifty percent (50%) of the parking lot landscaping requirements provided that trees planted along the site perimeter also serve to screen and shade the interior of the parking lot; or
- The Planning Director may waive up to fifty percent (50%) of the parking lot landscaping requirements if a low decorative wall or fence of a minimum height of no less than forty two inches (42") is installed along the parking area perimeter that also serves to screen the parking area from public view; or
- Provided there are no adverse impacts on adjoining properties, an exemption may be granted by the Planning Director from the landscaping screening requirements along a side lot line that is not adjacent to a street.

7. Tree Preservation as Administrative Relief:

The preservation of valuable trees may serve as a credit in lieu of required shade trees as provided in § 7.4.207.

Required Street Trees in the MU Zone Districts Standards (7.4.320)

1. Street trees in mixed use zone districts shall be located in the public right-of-way. Street trees shall be planted along all streets in a MU zone district in accord with the street right-of-way design standards stated in the Subdivision Code, article 7, part 7 (§7.7.704) , and in the following amounts:

- a. Adjacent to any street, except alleys, at least one (1) tree for every thirty (30) linear feet of streetscape or fraction thereof, as measured from the corners of the property.
- b. The required quantity of trees within the landscape setback may be met with a combination of street trees and required landscape setback trees along the following street types

- Four (4) lane parkway: (minor arterial)
- Six (6) lane parkway: (principal arterial)
- One-way couplet: (principal arterial)
- Expressway: (expressway)

2. Street trees shall be planted along all enhanced drive aisles at least one (1) tree for every thirty (30) linear feet of streetscape or fraction thereof, as measured from the corners of the property.

Internal Landscaping Standard (7.4.322.B)

The internal area and tree requirements for mixed use zone districts shall conform to Section 7.4.322 of the Zoning Code.

Landscape Buffers and Screens in MU Zone Districts Standards (7.3.323.I)

1. Landscape buffers and screens are one type of transition tool that can be used to separate and mitigate incompatible land uses that are either adjacent to or directly across from each other. Where used, landscape buffers and screening shall provide visual barriers between different land uses, enhance the streetscape, provide privacy, and protect uses from wind, dust, noise, traffic, glare, visual disorder, and harmful or noxious effects.

2. Development in MU Zone Districts:
The landscape buffer and screening standards stated in § 7.4.323 shall apply only if an applicant has first

incorporated site and building transitions, green/open space transitions, and transition uses as transition tools, according to article 4, part 11 and either:

- a. The Planning Director finds that use of the transition tools described in article 4, part 11 is not possible; and/or
- b. The Planning Director finds that landscape buffers and screens are necessary to mitigate potentially adverse impacts between adjoining land uses.

G. Context and Transitions

Introduction

In many communities, transitions between adjacent land uses with different intensities are typically achieved through back-to-back building orientation, large distances between uses, and heavily landscaped buffer areas, often with fences and walls. However, some of the negative results of these techniques include excessive land consumption and interference with pedestrian and vehicle connections. Accordingly, the following standards and guidelines encourage the use of alternative transition tools, including site/building transitions (such as reducing the scale of commercial building mass next to residential), and development of less intense land uses between commercial and single-family residential areas (such as lower-intensity office, civic/open space, or multi-family land uses). Limited operational compatibility standards are offered as a tool to further ease transitions from more intense to less intense land uses. Landscaped buffers, walls, and fences are used only when these other alternative transitions are not effective or not possible, given site conditions and constraints, or not desirable given prevailing development patterns in a specific area.

Purpose

This part is intended to provide land use tools to mitigate possible conflicts between land uses of varying intensities and differing character. This part shall apply to all development in MU zone districts where either of the following occurs:

1. Development of a more intensive land use adjacent to an existing, planned or zoned less-intensive land use, either inside or outside the MU zone district boundary. The Planning Director shall have the authority to make a final determination regarding relative intensity of adjacent land uses, taking into consideration, at a minimum, the relative size, design, operations and traffic generation patterns of the adjacent land uses; or
2. Establishment of visual impacts, uses or activities on a development site that, as determined by the Planning Director, could reasonably be regarded as a nuisance for neighbors.

Transition Tools

Standards (7.4.1103)

1. When a transition tool is required in a MU zone dis-

trict, an applicant shall incorporate site and building transition tools, green/open space transition tools, and transition uses before using landscape buffers or screens.

2. The following are approaches, methods and techniques that are permitted transition tools under this part:

- a. Site and building transition tools, including but not limited to, building setbacks as established by surrounding development, building placement and orientation as established by surrounding development, similar building height, similar building width, similar roof form, similar building materials, and facade articulation (Figure IV.54).
- b. Green/open space transition tools, including but not limited to the use of courts, squares, parks and plazas, and use of natural features such as topography, waterways, and existing stands of trees.
- c. Transition uses and other community-serving uses as transitions, such as, but not limited to the transition uses cited in § 7.3.302(J), and siting lesser intensive uses at the perimeter of the MU zone district.
- d. Parkway, streets and streetscapes;
- e. Operational standards, and
- f. Landscape buffers and screens.



Figure IV.54– Building transitions

Guidelines

1. Mixed use development should employ the following techniques as applicable to ensure compatibility with surrounding development. For purposes of these transition tools, the term “surrounding development” shall mean (1) immediately adjacent development on the same block face or on facing blocks as the

subject site, as well as (2) prevalent patterns established in the existing neighborhood located within one-quarter mile of the subject development site.

- a. Use similar building setbacks, as established by surrounding development;
- b. Use similar building placement and orientation, as prevalent in surrounding development;
- c. Use similar building height as exists for immediately adjacent development (e.g., step down the building height of the more intensive land use to approximately match the building height of an adjacent, less intensive land use);
- d. Use similar building width, as prevalent in surrounding development;
- e. Use similar roof form and building materials, as found on immediately adjacent development;
- f. Mitigate the larger mass of commercial, civic, and industrial buildings with façade articulation;
- g. Use front-to-front nonresidential to residential building orientations, especially with commercial uses that are pedestrian-intensive (e.g., restaurants, banks);
- h. Orient land uses with potentially adverse impacts, features, or uses away from neighboring uses. For example, avoid placing garages, parking lots, or service areas facing the fronts of neighboring buildings.



Figure IV.55—Building form transition

2. Green/Open Space Transitions: Mixed use development may employ the following techniques to provide transitions and ensure compatibility with surrounding development:

- Use small green spaces, courts, squares, parks, plazas, and similar spaces as transition areas that can also function as community gathering places

(Figure IV.56).

- Use existing natural features as transitions, including natural differences in topography (not retaining walls), streams, existing stands of trees, and similar features. When existing natural features are used as transitions, the City may still require that adequate pedestrian connections to adjacent land uses be accommodated.



Figure IV.56—Plaza transition

3. Transition Uses and Other Community-Serving Uses as Transitions.

- An applicant may site a transition use, as defined and described in Section 7.2.302.J of the Zoning Code, or any other similar community-serving use approved by the City as transitions to lower-intensity, adjacent uses, such as residential.
- For example, when office, small-scale retail, pedestrian-intensive retail, civic, or public uses are planned as part of the same development containing more intensive commercial uses, the applicant may site the less intensive uses or more community-serving uses as transitions to lower-intensity, adjacent uses, such as residential. Post offices, banks, and restaurants—all of which are community-serving uses—may be sited next to, and/or fronting, adjacent medium-density residential uses.

4. Parkway, Streets, and Streetscapes: The distance and separation afforded by the public right-of-way, together with similar or the same type of streetscape improvements on both sides of parkway or street, may be utilized as a transition to adjacent development (Figures IV.57 and IV. 58).



Figure IV.57—Streetscape transition to single family

5. Landscape Buffers and Screening Transitions. Where application of the transitions tools in subsections 1, 2, 3, and 4 above, are not possible, or where the Planning Director determines these transition tools by themselves do not create an adequate transition to or buffer for less intensive land uses, the landscape buffer and screening requirements stated in Section 7.4.323 of the Zoning Code shall apply.

Operational Compatibility Standard (7.4.1104)

The Planning Director may impose conditions upon the approval of rezoning and other discretionary development actions to ensure that development in a MU zone district will be compatible with existing and planned neighborhoods and uses, including but not limited to conditions regarding the following:

- The availability or ability to develop specific uses otherwise allowed by article 3 of the Zoning Code;

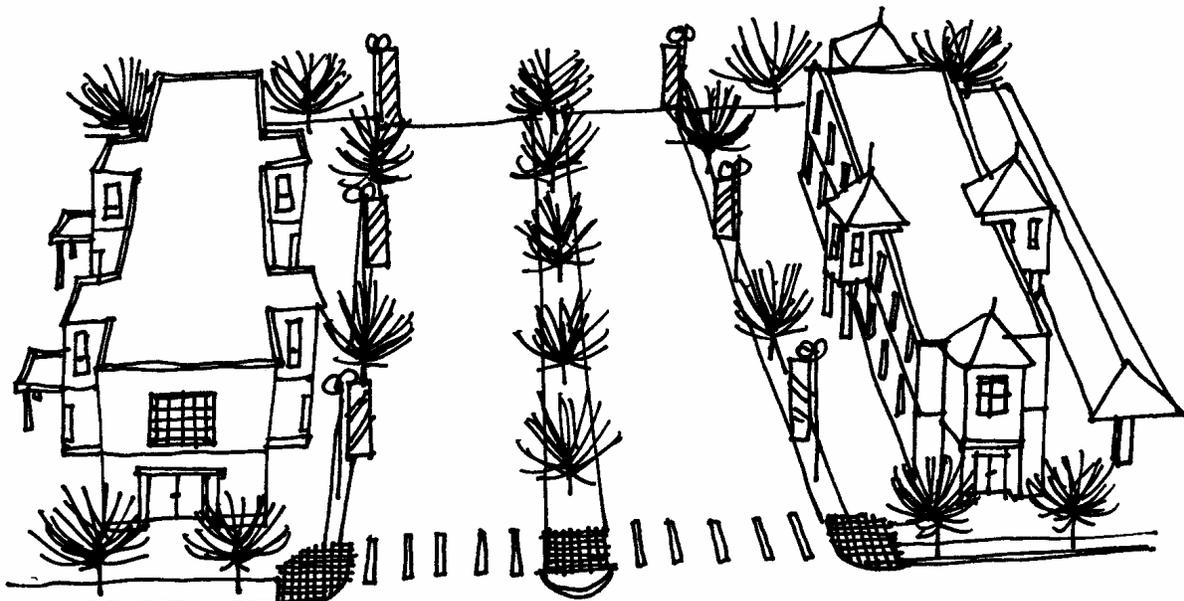


Figure IV.58– Streetscape transition

- Hours of operation;
- Hours of deliveries and other similar uses;
- Location, intensity and hours of operation of exterior lighting, including security lighting;
- Placement of trash receptacles;
- Amplification of music in a place of entertainment;
- Location of delivery and loading zones; and
- Placement and illumination of outdoor vending machines.

Transitions Along the Public Right-of-Way Guidelines

Within a mixed use zone district or other commercial center or mixed use development, vehicle drivers on the adjacent public rights-of-way should be able to recognize the increased presence of pedestrians and bicyclists, who in turn should perceive the improved accommodation of alternate-mode travel and increased personal safety in these places (Figure IV.59). The following guidelines are intended to ensure such transitions and visible “signals” to drivers on public right-of-ways adjacent to commercial centers or mixed use developments.

All new development within a mixed use zone district should incorporate the following guidelines to achieve the intent stated above:

1. Provide reduced street widths and travel speeds;
2. Incorporate bulb-outs to reduce the exposure time for a pedestrian to cross the street, slow traffic and notify the automobile driver of the presence of pedestrians;
3. Reinforce smaller curb returns (to prevent damage from delivery trucks jumping the curb when turning);
4. Incorporate medians and islands into streets for pedestrian refuge;
5. Incorporate on-street parking, which may be diagonal or parallel;
6. Enhance mid-block and intersection crosswalks with respect to paving treatments, signal activation, curb cuts, and similar elements; and
7. Integrate a sidewalk and pedestrian walkway system into the development’s on-site circulation patterns. Emphasis should be placed on connections between front doors, parking, and transit.

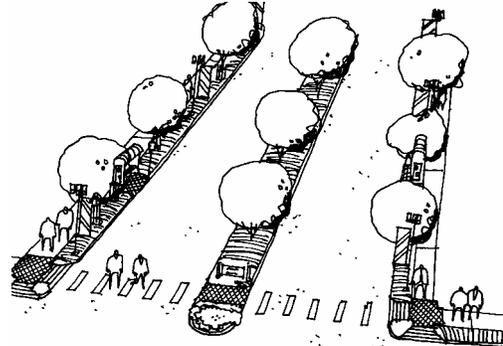


Figure IV.59— Parkway transition



Figure V.60– Springs Transit bus

H. Transit

Introduction

Transit and mixed use development clearly have a mutually supportive relationship. Concentrating higher density mixed use around a transit station can generate a significant number of riders for the transit system, while the pedestrian orientation of mixed use centers means that the availability of transit service can translate into an increase in visitors, customers, and residents for the development. Two slightly different approaches to transit and mixed use development are possible. One is primarily transit-oriented, where future mixed use developments are planned around key locations on an existing or planned transit route. The other is development oriented, where future transit routes are extended to serve existing or planned mixed use centers that are transit ready.

Purpose

This part is intended to ensure that existing and future public transit facilities are incorporated into the design of new non-residential and multi-family residential developments.

Standards (7.4.803)

1. All development in MU zone districts shall include areas designated for transit shelters or transit station locations, as requested by the transit agency and consistent with adopted transportation and transit plans, standards and guidelines, and current local transportation activities.
2. Pedestrian Linkages: All new development in MU zone districts shall provide direct pedestrian linkages to existing and proposed transit shelters or facilities located within the development or adjacent to the development, according to article 4, part 7.

Guidelines

1. Pedestrian Linkages -Distance

Transit facilities should not be located more than one thousand, two hundred (1,200) feet in walking distance from the center of the mixed use development.

2. Park and Ride Lots

Park and ride lots should be located in proximity to mixed use centers to take advantage of potential trip combinations.

3. Transit Facilities

Where possible, transit facilities should be incorporated as focal points and amenities in mixed use centers.



Figure IV.61 – Fully shielded lighting

I. LIGHTING

Introduction

Lighting in a mixed use development is a major determinant of nighttime activity. It should create a sense of safety, particularly for pedestrians, and emphasize key features of the site. At the same time, it needs to balance the lighting needs of the different uses on the site and reinforce a unified image and identity for the project.

Purpose

The lighting in a mixed use center should be designed to create a well-balanced, integrated lighting plan for public and private locations that enhances vehicular and pedestrian visibility while minimizing glare and contrast. The intent for lighting is to provide needed illumination of the site, while at the same time preventing glare to residential uses either within or adjacent to the site. Light fixtures should be oriented to pedestrian circulation so that pedestrian ways are emphasized and safety is enhanced.

Standards (7.4.102.D)

All exterior lighting must be arranged to reflect away from any adjoining premises and any public right of way, and it shall be shielded to contain all direct rays on the site. All exterior lighting within a MU zone district, including signage lighting, shall meet the following additional standards:

1. A development-wide lighting plan shall be submitted for review at the time a MU concept plan is submitted. A development-wide lighting plan shall address at a minimum the general location and general types of lighting to include the following: public and private street lighting, pedestrian lighting, parking lot lighting, residential area lighting, signage lighting, and lighting for service and delivery areas.
2. A detailed lighting plan that indicates lighting levels shall be submitted for review at the time a development plan is submitted.
3. The detailed lighting plan shall include designs of poles and fixtures that are compatible with or complement surrounding neighborhoods.
4. Fully shielded lighting fixtures shall be used in all parking areas, in service and delivery areas, in residential areas, and for signage.
5. Ornamental light fixtures may be used in street-scapes; however, public street lighting shall meet the standards of and be approved by CSU. Both

public and private lighting shall be coordinated to create a uniform, consistent system of lighting that enhances pedestrian visibility while minimizing lighting glare and contrast.

6. The light element (lamp or globe) of a fixture shall not extend below the cutoff shield.
7. When a canopy (freestanding or attached) is illuminated, the lighting fixture shall not extend below the ceiling of the canopy.
8. Lighting of commercial uses adjacent to or within the immediate vicinity of residential uses shall be designed with fixtures and poles that illuminate commercial uses while eliminating light trespass into residential areas.

Guidelines

The character of a development should be reflected in its lighting. The light fixtures along streets should contribute to a coordinated, attractive streetscape that works well with street trees, curb cuts, signage, street furniture and other features to create continuity in the streetscape.

1. A mixed use development will often include residential uses and therefore lighting should be designed to create compatibility between commercial and residential uses. The types of issues that would be addressed are glare, safety, illumination levels, clear designation of pedestrian ways, and aesthetic appeal.
2. Pedestrian circulation is encouraged and therefore pedestrian oriented lighting is encouraged. Pedestrian area lighting should emphasize the location of pedestrian ways and be in character with the architectural and landscape design of the center.
3. The use of a greater number of low fixtures is preferred over fewer taller fixtures.
4. Parking area lighting should complement the lighting of adjacent streets and properties, with consistent fixtures, source colors and illumination levels. When adjacent to pedestrian circulation and gathering areas, parking area lighting should not overpower the quality of pedestrian area lighting.



Figure IV.62– Project entry signage

J. SIGNAGE

Introduction

Signage in a mixed use center is important not only for effectively guiding vehicular and pedestrian circulation, but also for establishing a project identity. Locational, directional, and tenant signage provide necessary orientation for users. It is also important for marketing the various uses and creating a positive image of the development. Signage that is designed according to a theme consistent with the overall design of the development serves to unify the center.

Purpose

The signage in a mixed use center is to be coordinated to provide a unified signage design. Signage is to be planned to clearly identify different use areas, complement the pedestrian nature of the center and exhibit architectural consistency with the overall design of the center.

Standards (7.4.406)

1. Total square footage for the low profile, wall, and roof signs may be used as wall sign or signs, roof signs or a low profile sign. Signs must be placed on

Table 5 Major Signs Allowed in Specific Zones

Sign Types and Standards	A, R, R-1-9000, R-1-6000, R-2, R-5, MU-NC,PUD, and SU	C-5/P, C-6/P, MU-CC, MU-R/EC, PBC, PIP-1 and PIP-2
Low Profile, Wall or Roof Signs		
Maximum Size (in sq. ft.)	40 sq. ft.	1.5 sq. ft. multiplied by the building length
Number Allowed	1 low profile or wall/project	1 low profile or wall/building
Maximum Height	6'	Roof signs not to extend above roof line
Minimum Setback	Placed at entrance	3'
Freestanding Signs		
Maximum, Number & Size (in sq. ft.)		
Number & Size by District		
12 acres or less		1 at 150 sq. ft. max
More than 12 acres		2 at 150 sq. ft. max
PBC, more than 40 ac.		2 at 300 sq. ft. max or 1 at 450 sq. ft. max
Number & Size by Lot	N/A	N/A
1 acre or less		
More than 1 acre, but less than 5 acres		
5 acres or more		
Maximum Height		30'
Minimum Setbacks		10'

the side of the building from which it draws its allowed square footage. There shall be no more than one (1) low profile sign per freestanding building.

2. The building length is the number of linear feet of the exterior wall of the side of the building where the sign will be placed.

3. Human Service Establishments in Residential Zones: One sign identifying the human service establishment not exceeding two (2) sq. ft. in area, attached to the dwelling and not illuminated shall be allowed per human service establishment.

4. Live/Work Units: On-premise signs are limited to no more than two non-animated, non-illuminated wall or window signs collectively not exceeding 4 square feet in total area.



Figure IV.63— Wayfinding signage

Guidelines (7.4.406)

1. The unified sign design elements should identify a recognizable character for sign design that contributes to the character of the center. Signs should reflect the character through consistency of materials, illumination, sizes, proportions and locations.

2. Signs should be carefully integrated within the site, landscape and architectural design context within which they are located. Size, shape and proportions should be compatible with the size and scale of the surroundings and should not compete with or obscure other design features of the site, landscape or structures. Signage should also provide attractive and appropriately placed designation of primary entrances

3. In the vicinity of residential uses, lighting should be reduced or extinguished during non-business hours or at a certain hour in the evening, to reduce adverse impacts of commercial lighting on residential use. Internally illuminated signs or awnings are generally discouraged.

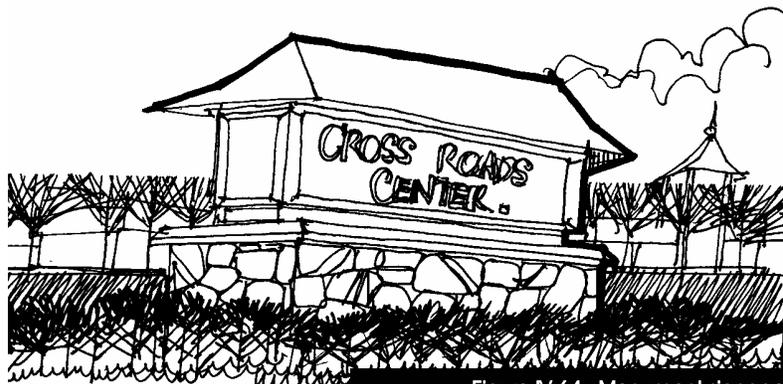


Figure IV.64— Monument signage

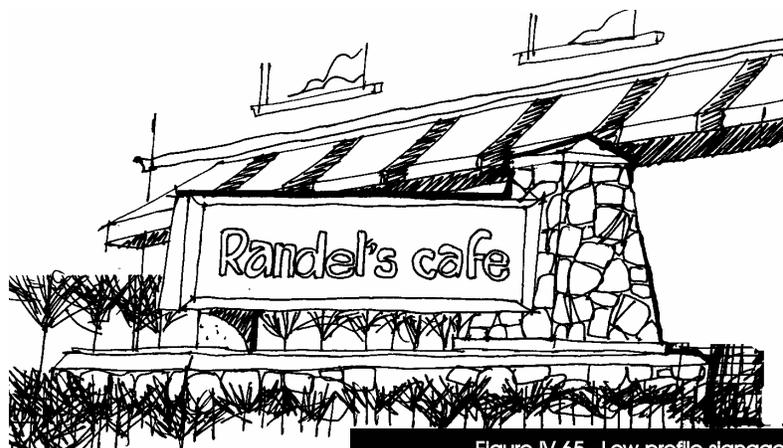


Figure IV.65— Low-profile signage

V. Street Standards

Roadway/Transportation

Introduction

Mixed use centers will incorporate all modes of transportation (motorized vehicles, bicycles, transit and pedestrians) both safely and efficiently by meeting the design standards outlined in the *Subdivision Policy and Public Works Design Manual*, in the *Mixed Use Development Design Manual*, and in article 4 of the Zoning Code.

Since mixed use developments tend to create higher traffic impacts than those that are strictly residential, mixed use centers will be limited to locations along arterial and collector streets, with the cross-street for an arterial being no less than a collector. This will minimize the impact on adjacent residential neighborhoods, including Traditional Neighborhood Developments (TND). A mixed use center in combination with a TND neighborhood has the potential to reduce traffic impacts by providing alternatives to automobile trips within the neighborhood and convenient connections to the regional transit and bicycle systems.

Except as expressly waived, the Traffic Engineering Division of Public Works will adhere to standards set forth in the *Subdivision Policy and Public Works Design Manual*, the *Mixed Use Development Design Manual*, and article 4 of the Zoning Code when reviewing mixed use development proposals.

Access and Connectivity

Access and connectivity for all modes of transportation are key to developing viable mixed use centers. Access to mixed use centers needs to be safe for both vehicles and pedestrians. Mixed use centers must also maintain good connectivity and safe pedestrian crossings while not overburdening the regional transportation system with traffic signals. The following access standards are to be met for a mixed use development:

1. A minimum of one access point per property ownership shall be permitted, which may be jointly shared with adjacent properties.
2. Signalized access will only be allowed when agreed to by the Traffic Engineer or his designee.

nee and only when traffic impacts are forecast to meet signal warrants as identified in the *Manual on Uniform Traffic Control Devices* (MUTCD). Pedestrian signals will be allowed when traffic and/or pedestrian impacts are forecast by the Traffic Study to meet signal warrants as defined in the MUTCD. The installation of traffic and pedestrian signals for proposed development will not be the responsibility of the City of Colorado Springs.

3. To determine the placement of a signalized access when warrants are met, a progression analysis shall be conducted within a traffic study for existing plus site generated traffic and for twenty-year horizon conditions in order to meet City standards for traffic flow along an arterial corridor.
4. Signalized access will only be allowed for streets constructed to City standards.
5. Mixed use developments will be based on a block structure to provide connectivity and to allow block length combinations that will provide flexibility in providing pedestrian access and signalized access when warranted. Block lengths, as measured from curb face to curb face, will be a minimum of two hundred (200) feet and a maximum of six hundred (600) feet, with the average of all block lengths in a mixed-use development not to exceed five hundred (500) feet. No vehicular access will be allowed into mixed use centers within six hundred (600) feet of two intersecting principal arterials or higher classified roadways. Pedestrian and/or bicycle access into the site will be required within two hundred (200) feet of two intersecting principal arterials.
6. Left- or right-turn storage lanes may be required along arterials or parkways and along entry/spine streets that provide access to a mixed use center. The specific design of such lanes shall be based on twenty-year traffic projections for that roadway and meet the guidelines outlined in the Public Works Subdivision Design Manual.
7. Driveways that provide access to parking lots from perimeter streets into mixed use centers shall be of sufficient length to allow vehicles to enter the center and not be obstructed from on-site conflicts in which traffic queues onto the public or private street system. An example of this type of conflict is when a vehicle is stopped in the entry driveway waiting

for a vehicle to vacate a parking stall too close to the street creating a queue of vehicles behind it. The greater the peak hour traffic demand for the mixed use center, the longer the unobstructed driveway must be. The unobstructed length shall be measured from the back of the sidewalk or the stop bar exiting the site to the first intersection back of curb or parking drive aisle. The minimum driveway lengths are as follows:

Peak Hour Driveway Entering Volume	Unsignalized Minimum Driveway Lengths (X)	Signalized Minimum Driveway Lengths (X)
0-25	25	75
25-50	50	100
50-75	75	125
75-100	100	150
100-125	125	175
>125	150	200

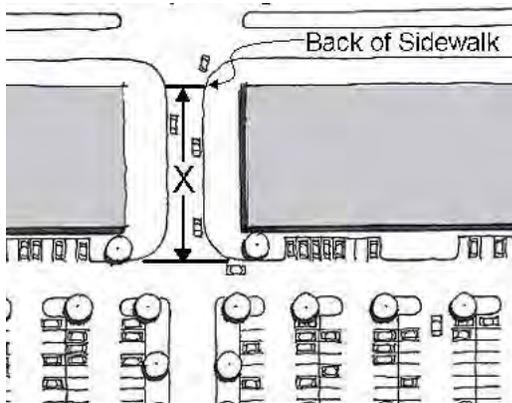


Figure V.1- Driveway length

8. Pedestrian access shall consist of sidewalks and an on-site system of pedestrian walkways as identified in both the pedestrian assessment portion of the Traffic Study and in the pedestrian circulation plan submitted as part of the Mixed Use Concept Plan. Sidewalks and on-site walkways shall provide direct, continuous access between the intended points of travel. Specifically, pedestrian connections shall be provided to and between the following points:

- From parking to the primary entrance or entrances to each building housing a principal use,
- Any sidewalk or walkway on adjacent properties that extends to the boundaries shared with the development,
- Any public sidewalk system along the perimeter streets adjacent to the development site, existing or

- planned transit stations, shelters, stops and park-n-ride locations,
 - Any public amenities.
- 9. All sidewalks, pedestrian walkways, or trails shall have and maintain a minimum unobstructed pathway width of six (6) feet and be detached from the back of curb, unless otherwise referenced. Those that accommodate both pedestrians and bicycles shall provide a minimum pathway width of twelve (12) feet.

Pedestrian Environment

The goal of the Pedestrian Element of the *Intermodal Transportation Plan* is “to allow the safe and direct movement by foot and wheelchair within our city and to provide safe and direct pedestrian access to schools, recreation facilities, and public facilities.” This goal is carried through and expanded upon in mixed use centers where the layout and design of mixed-use development requires pedestrians to be accommodated on a system of walkways and sidewalks. Because of the additional emphasis on the pedestrian, standards and guidelines are necessary to ensure facilities are in place to accommodate pedestrian traffic in both a safe and efficient manner, while minimizing conflicts with vehicular traffic. Following are the pedestrian standards to be maintained for a mixed-use development:

1. A pedestrian assessment will be conducted as part of the traffic study for a mixed use center. In addition to the other information required as part of the traffic study, the assessment shall provide information on estimated hourly pedestrian and vehicular traffic for the mixed use development.
2. Entry/spine streets shall be required for all Commercial Center (CC) and Regional/Employment Center (R/EC) mixed use developments. Entry/spine streets are to provide the main access from arterial streets into the center and are intended to clearly identify a driver has entered a “unique” area. Within a mixed use development, entry/spine streets are meant to concentrate the pedestrian environment. An entry/spine street has slower speeds and can have up to 4 lanes with no parking if traffic demand warrants it.
3. Curb extensions shall be required on all public and private street intersections where on-

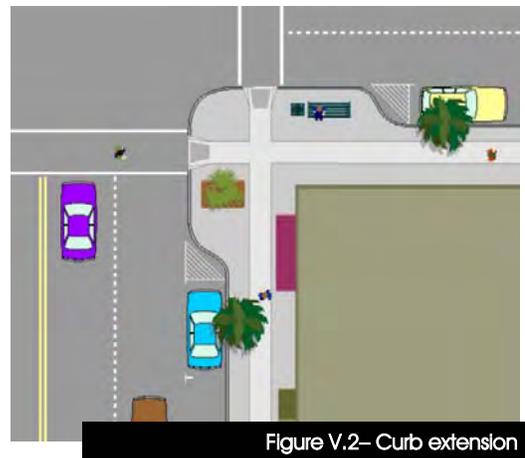


Figure V.2– Curb extension

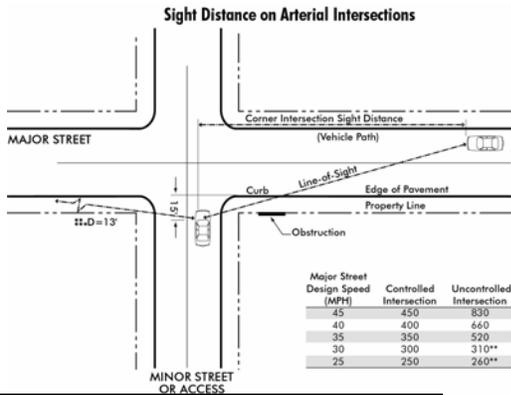


Figure V.3– Sight distances on arterial intersection

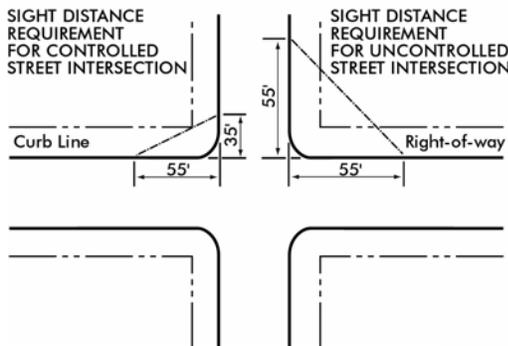


Figure V.4– Sight distances on internal intersections

street parking is allowed (Figure V.2). Curb extensions will not be allowed to extend across an on-street bicycle lane or across a right-turn lane.

4. Clear sight distances free from obstructions must be maintained to allow vehicles to safely make turns at intersections and for pedestrians to have adequate time to cross the street. Therefore the *Subdivision Policy and Public Works Design Manual Site Distance Requirements* will be applied to proposed projects. Intersection design shall meet MUTCD guidelines and may include enhanced crosswalks with directional ramps, pavement treatment, median refuge islands and pedestrian indicators (Figures V.3 & 4).
5. Pedestrian refuge areas or medians will be required on all roadways classified as major collector and above.
6. All pedestrian crossings (Figure V.5) shall comply with the standards set forth in the Americans with Disabilities Act (ADA) or *Subdivision Policy and Public Works Design Manual*, whichever is the stricter rule. Pedestrian ramps shall be oriented directionally only.
7. Delineated crosswalks with patterned surface can be effective traffic control devices; however, they should not be used indiscriminately. It has been shown that pedestrians may develop a false sense of security regarding their use of a marked location and step into the crossing without adequately checking for oncoming vehicles. Information from the

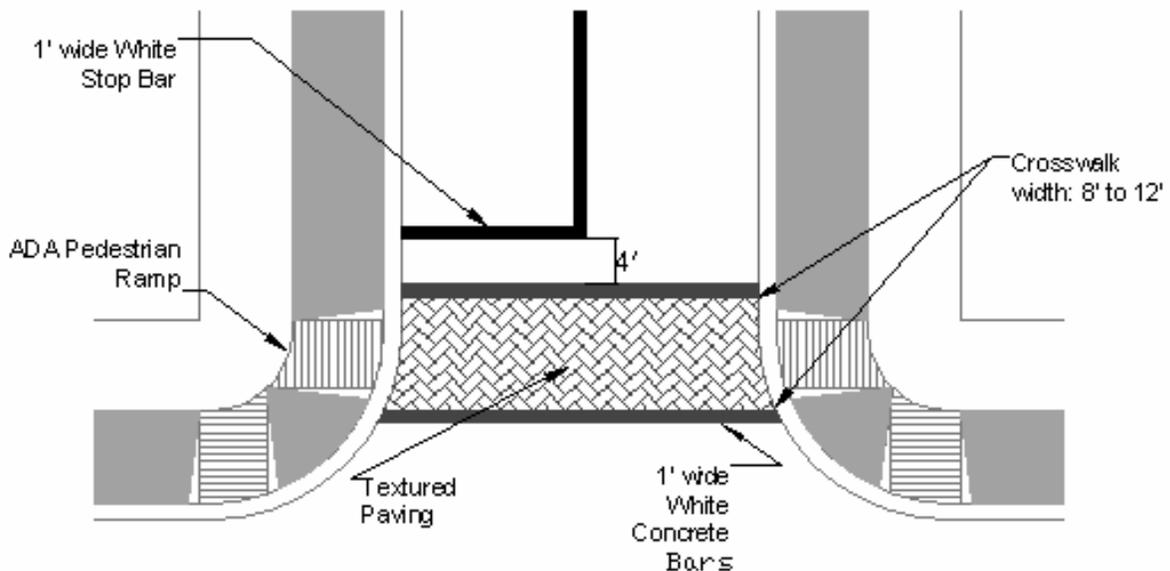


Figure V.5– Pedestrian crossing (controlled & uncontrolled)

pedestrian assessment will be evaluated based on the following criteria to determine if crosswalks should be installed at uncontrolled intersections and/or mid-block locations:

Uncontrolled Intersection Criteria

- a. The pedestrian volume is 40 (25 if predominantly young and/or elderly pedestrians) or more per hour during the peak hour of pedestrian usage, or there are 30 (15 if predominantly young and/or elderly pedestrians) groupings of two or more pedestrians for a continuous two-hour period twice a day, and
- b. The 85th percentile approach speed is below 40 mph, and
- c. The roadway has less than three travel lanes in one direction, and
- d. The proposed marked crosswalk has adequate lighting for nighttime visibility, and
- e. The crosswalk location meets the minimum sight distance criteria, and
- f. The roadway has an ADT in excess of 2,700 vpd, and
- g. There is no controlled crosswalk within 400 feet of the proposed crosswalk.

Marked Mid-Block Crossing Criteria

- h. All of the "Uncontrolled Intersection" criteria must be met and
- i. The length of the block between intersections is greater than 400 feet, and
- j. There is reasonable demand by pedestrians to cross within a concentrated area 300 feet (600 feet for principal arterials) or greater from the nearest signal or stop sign controlled intersection, and
- k. There is a high pedestrian volume generator nearby, and
- l. If Uncontrolled Intersection criterion "f" is not met, then pedestrians must be channeled to the mid-block crossing.

Alternative Modes

Mixed use centers can enhance quality of life by increasing mobility options for users of a center. Streets designed with multi-modal options and safe circula-

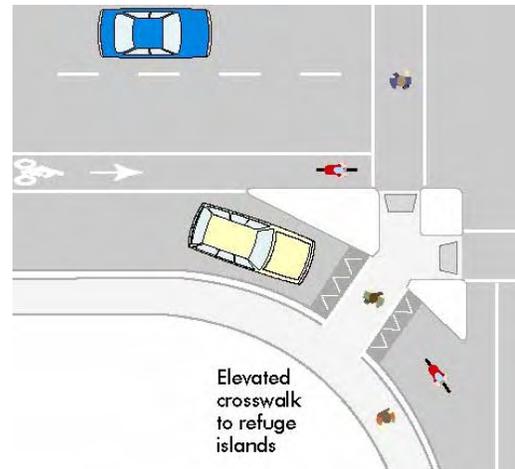


Figure V.6– Pedestrian table

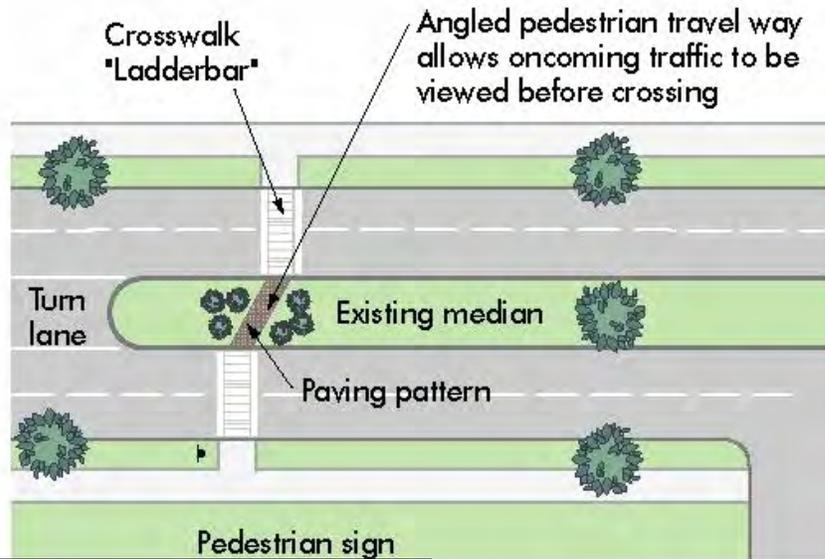


Figure V.7— Mid-block pedestrian crossing

tion for transit, bicycles and pedestrians offer people more choices to meet their individual needs. The standards identified below and within the *Subdivision Policy and Public Works Design Manual* and article 4 of the Zoning Code will ensure these objectives are met for mixed-use centers.

Transit

Properly designed mixed-use centers are supportive of transit and modes of transportation other

than the automobile. Mixed use centers typically have concentrated areas of activity that are pedestrian oriented and have bus stops integrated into the site with direct pedestrian connections to various uses within the center. People are more willing to choose transit when retail, commercial services, offices, entertainment and residential uses are within easy walking distance of one another in a well defined location.

Mixed use centers also help generate off-peak transit use because trips to and from these centers occur throughout the day and into the evening. This adds to the economic vitality of business districts by increasing the diversity of the center with attractive and convenient services to visitors, residents and employees alike.

Bicycles

Bicycles are an efficient and affordable form of transportation that can help reduce vehicle trips, improve quality of life and promote good health. The bicycle becomes a viable option for trips to and from a mixed use center when connected to the regional bicycle system and to the surrounding local street system. These facilities may be provided by on- or off-street bicycle routes or by combining bicycle trips with transit. Mixed use centers need to accommodate bicycle users as an integral mode of transportation when planning a site.

Bicycle facilities should be provided on street in most cases, with off-street trails serving more regionally oriented trips. Off-street multi-use trails work well where access points are limited and pedestrian traffic is light, but create safety problems in urban, mixed use centers. This is because the vehicle/bicycle and vehicle/pedestrian conflicts are greatest under these conditions. Studies have shown that cyclists are often safer when they ride within the roadway because motorists are accustomed to watching for other users within a given "sight" window. Putting a cyclist on a multi-use sidewalk adjacent to the roadway creates multiple safety issues. It removes the cyclist from the driver's sight window, placing the cyclist at greater risk when crossing access points or numerous driveways. It also creates significant conflicts with pedestrians. Collisions between bicyclists and slower-moving pedestrians can lead to serious injury.

The following are the Alternative Mode standards for transit and bicycles in a mixed-use development. Additional details may be found in the *Subdivision Policy and Public Works Design Manual* and article 4 of the Zoning Code:

Transit Standards

1. At non-signalized intersections, transit stops will be located upstream or on the near side of the intersection. Where a right-turn lane exists, the transit stop shall be located in the right turn lane, per transit standards outlined within the *Subdivision Policy and Public Works Design Manual*.
2. Tier I transit stops at signalized intersections shall be located immediately downstream (far side) from the intersection. (Tier I of the transit system is the collector system, which has bus stops located every 1/8 to 1/2 mile along a route and is designed to pick up passengers at each stop.)
3. All transit stops identified for a mixed use center will be well lit and include a shelter, bicycle rack and trash bins as outlined in the *Subdivision Policy and Public Works Design Manual*.
4. Major transit shelters will be required in Regional/Major Employment mixed use centers. Where a major transit shelter has been identified to be located, bus pullout lanes with the enhanced shelters will be required.



Figure V.8– Transit serving mixed-use

5. Where the *Public Transportation Plan* has identified a rapid transit corridor for a Tier III system to serve a mixed use center, a location for a multimodal transit center will be designated on the Mixed Use Concept Plan for the mixed-use development. (Tier III of the transit system includes bus rapid transit or light rail with stops at stations.)

Bicycle Standards

1. Bicycle parking facilities shall be provided for buildings within a mixed use center. Whenever possible, racks should be placed within fifty (50) feet but no more than one hundred (100) feet of building entrances where bicyclists would naturally transition to pedestrian mode. Bicycle parking facilities should be located in highly visible, well lit areas to minimize theft and vandalism.

2. The placement of the racks should minimize conflicts with both pedestrians and motorized traffic, and should be in clusters not to exceed 16 spaces each. The racks should be similar with their surroundings both in color and design.
3. When automobile parking spaces are provided within a structure, all required bicycle spaces shall be located inside that structure or shall be located in other areas protected from the weather. Bicycle parking lockers are encouraged for assigned use by employees and residents of multi-family residences.
4. Right-of-way dedication for all public trails on the City's *Bicycle Plan* will apply to the mixed use centers. Additionally, directional signs from the on-street system to the trail system will be provided at all access points. Locations where urban trails cross roadways within the mixed use center should be at controlled intersections when possible. Design of all crossings shall meet the guidelines spelled out in the *Subdivision Policy and Public Works Design Manual*.



Figure V.9– Enhanced transit shelter

Traffic Studies

Traffic studies are needed to determine impacts of proposed development on the existing and future transportation system. Traffic consultants

are encouraged to discuss proposed projects with the City Traffic Engineer prior to starting the study. This should provide a firm base of cooperation and communication between the City and the applicant in creating traffic characteristics that are in the best interest of the community.

To assure the public and the City that the traffic impact analysis adequately addresses the full impact of the development, any discounted trip generation may be conditioned as a maximum trip budget. If a future traffic impact is experienced that was not identified in the traffic study and it is determined that this impact resulted from the development's trip generation exceeding the maximum trip budget, the City may consider the following actions:

- Place a condition of approval on multi-phase projects requiring that a traffic count at all access points be conducted prior to issuance of building permits to determine if the trip estimates have been exceeded. If they have, subsequent building permits would be reduced to a point where the trip estimates are not exceeded.
- Place a condition of approval on the proposed development requiring the applicant implement a transportation demand management program to reduce traffic and demonstrate through driveway counts the resulting traffic analysis equal to or less than reported in the traffic study, or
- Provide additional mitigation to offset any impacts resulting from higher traffic volumes than reported in the traffic study.

Traffic studies shall meet all the criteria in the *Subdivision Policy and Public Works Design Manual* with all the assumptions being approved by the City Traffic Engineer or his designee. The following special criteria are to be used for mixed use proposals:

1. Conduct a Pedestrian Assessment to evaluate and define where pedestrian corridors will be located and to determine what surface and traffic control requirements are necessary.

The pedestrian assessment will need to address appropriate pedestrian entry points and connections to off-site destinations, sidewalks and walkways. It will serve as the basis for a pedestrian circulation plan that is to be included as part of the concept plan for mixed use center. At a minimum it is to include:

- Forecast peak hour pedestrian volume at intersections;
 - Identification of primary pedestrian and bicycle access points;
 - Connections to off-site bicycle and pedestrian facilities;
 - Intersection treatment; and
 - Transit connections.
2. Mixed use development traffic shall be calculated from the latest data contained within the *Institute of Transportation Engineers Trip Generation Report* or other industry publications such as the *ITE Journal*. Data limitations, data age, choice of peak hour or adjacent street traffic, choice of independent variable and choice of average rate versus statistical significant modification shall be presented and discussed. In the event data are not available for a proposed land use, the applicant must conduct a local trip generation study following procedures prescribed in the *ITE Trip Generation Manual* and provide sufficient justification for the proposed generation rate. This rate must be acceptable to the City Traffic Engineer.
 3. For mixed use centers, trip generation shall be based on both individual land use rates and on mixed use rates. After generating trips at full ITE rates, trip-making reduction factors may be used. These factors fall into two categories: those that reassign some portion of generated trips to the background stream of traffic and those that “remove” or “move” generated trips. In all cases, the underlying assumptions of the ITE Trip Generation rates must be recognized and considered before any reductions are claimed.
 - The first category of adjustments is when trips to the proposed development currently exist as part of the background traffic stream, referred to as a pass-by trip. Pass-by percentages identified in the *ITE Trip Genera-*

tion Manual or other industry publications may be used. Traffic must continue to be assigned to site driveways and access points, but is not added to the background stream of traffic. A technical appendix to the traffic study that illustrates the redirection of pass-by trips is recommended.

- The second category of adjustments is for internal site trips, transit use and transportation demand management (TDM) actions. In general, reductions are not recommended. However, if reductions are claimed, analytical support to show how the figures were derived must be provided. Assumptions regarding transit use and TDM actions will not be acceptable unless accompanied by specific implementation proposals that will become a condition of approval of the traffic study. Such implementation proposals must have a reasonable expectation of realization within a 5-year period after project initiation.

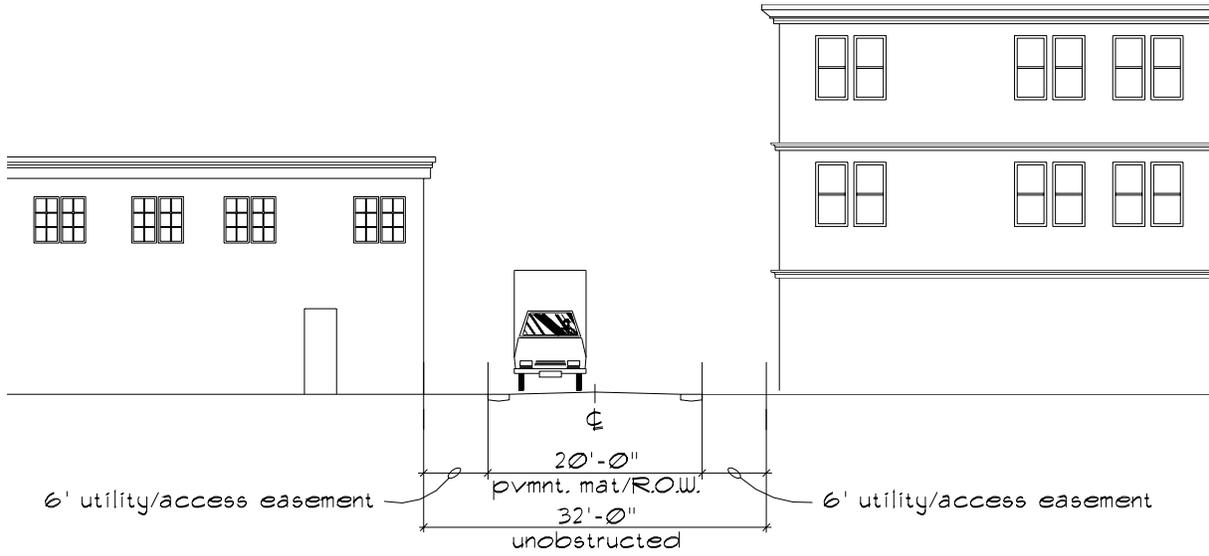
Roadway Classification/Cross Sections

Only two new roadway classifications and the modification of the TND parkway cross-section will be necessary to address mixed use centers. New roadways include a six-lane parkway with on-street bicycle lanes as the standard cross section for a principal arterial and an entry/spine street to clearly portray entrance into a mixed use center.

Modifications to the TND parkway cross-section are necessary to ensure on-street bicycle lanes as the standard while maintaining the streetscape to provide the visual calming effect found along TND/mixed use streets. An optional off-street multi-use trail is allowed on both parkways where curb cuts and intersecting streets are limited to reduce bicycle/vehicle conflicts.

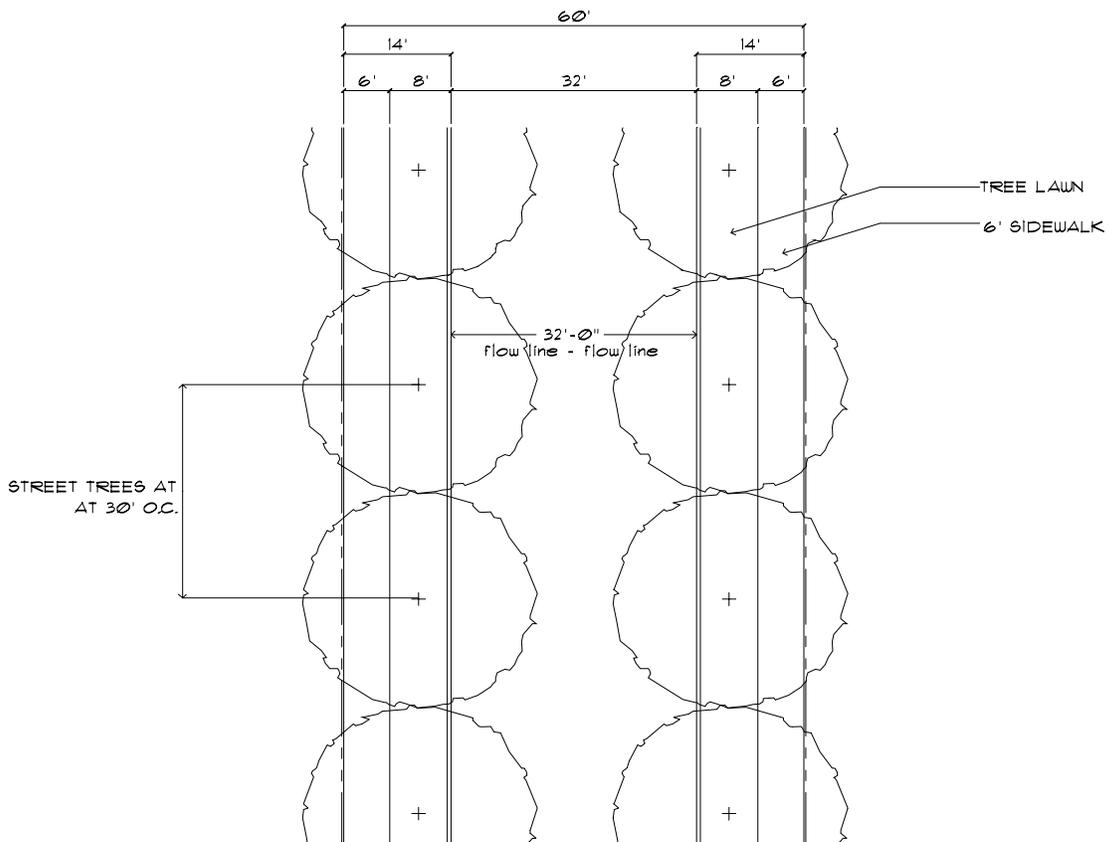
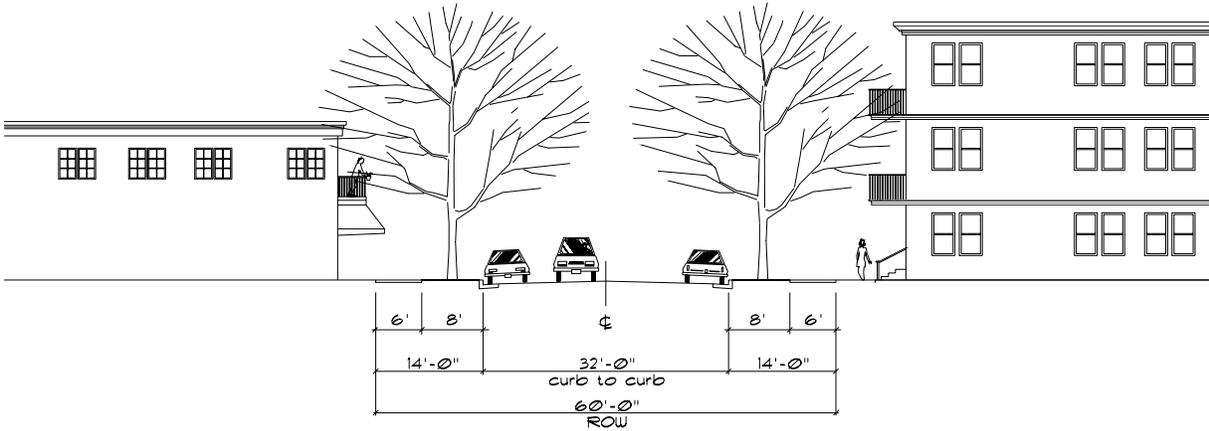
Mixed Use Development Alley

Purpose	Mixed use development alleys are designed to provide access to the rear or side of properties.
Right-of-Way	20'
Street Width	20'
Number of Travel Lanes	2
Median Type	N/A
Median Width	N/A
Parking	No
Maximum Daily Traffic Volumes	N/A
Tree Lawn Width	N/A
Sidewalk	N/A
Bike Lane	N/A



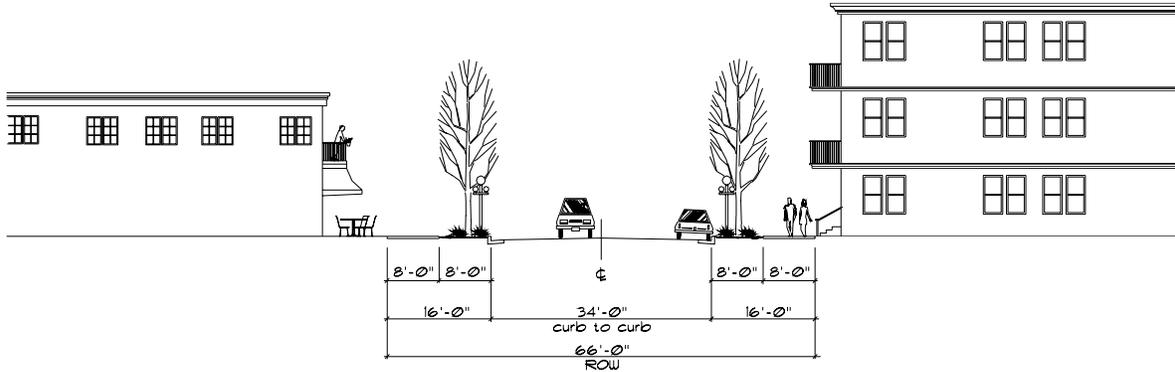
Mixed Use Development Local Street

Purpose	Mixed use development local streets are designed to serve the local access needs of residential, live/work, and commercial activities within a mixed use center.
Right-of-Way	60'
Street Width	32' flow line to flow line
Number of Travel Lanes	2
Median Type	None
Median Width	N/A
Parking	Yes
Maximum Daily Traffic Volumes	750
Minimum Horizontal Radius	700'
Block Length	600' max.
Alley	optional
Tree Lawn Width	8'
Sidewalk	6'
Bike Lane	None
Functional Classification	Minor Collector
Miscellaneous	Transit stops shall be accommodated where appropriate (at 800' - 1200')

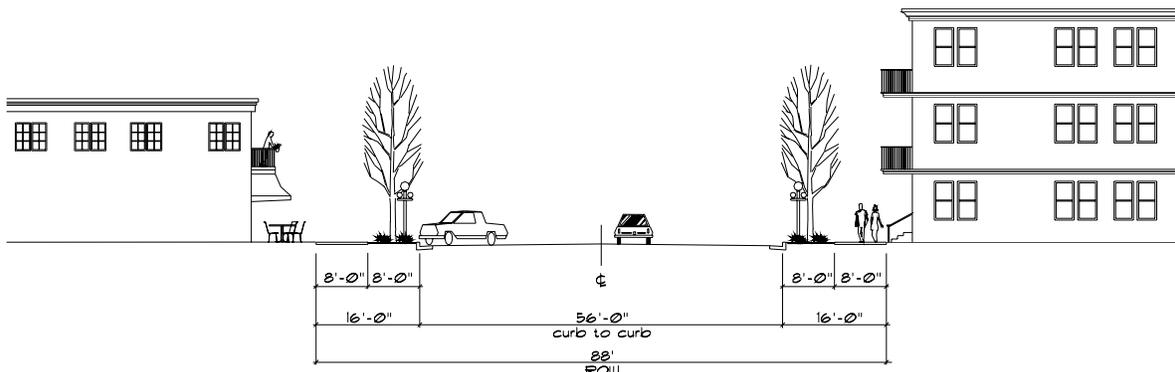
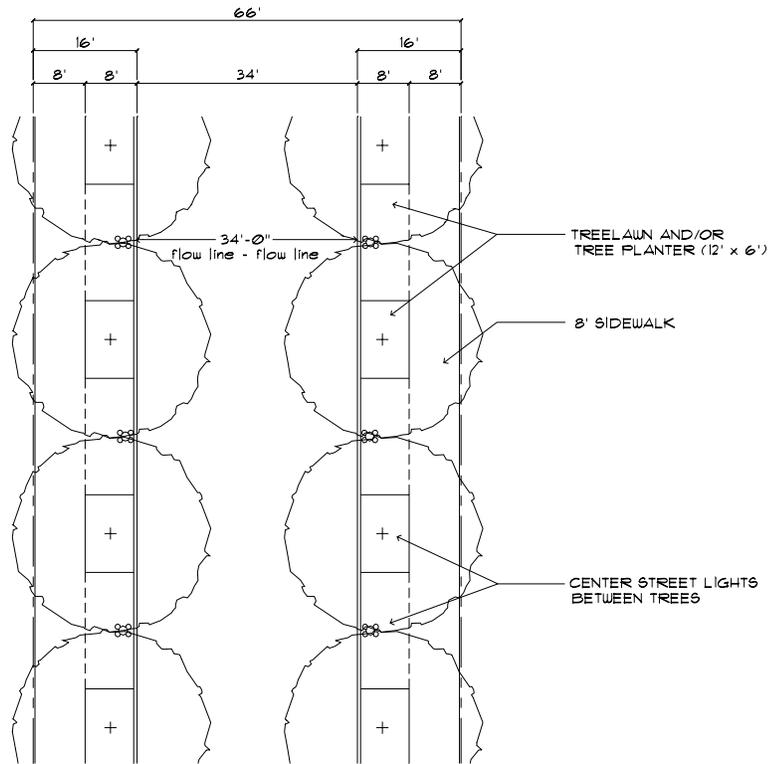


Mixed Use Development Collector Street

Purpose	Collector streets provide access from adjacent arterial streets into the mixed use activity center and serve as non-arterial perimeter streets.
Right-of-Way	66' Parallel Parking, 88' Diagonal Parking
Street Width	34' Parallel Parking, 56' Diagonal Parking flow line to flow line
Number of Travel Lanes	2
Median Type	None
Median Width	N/A
Parking	Yes – Parallel or Diagonal
Maximum Daily Traffic Volumes	5,000
Minimum Horizontal Radius	700'
Block Length	600' max.
Alley	optional
Tree Lawn Width	8'
Sidewalk	8'
Bike Lane	Permitted but not striped
Functional Classification	Commercial/Industrial Collector
Miscellaneous	Transit stops shall be accommodated where appropriate (at 800' - 1200')



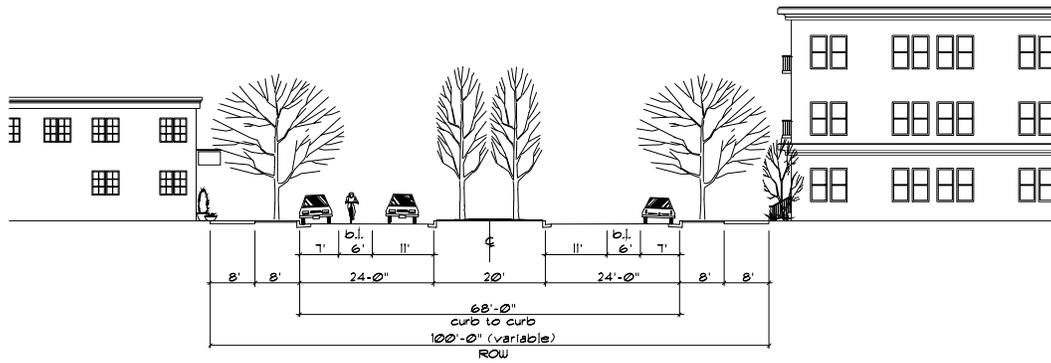
Collector Street with Parallel Parking



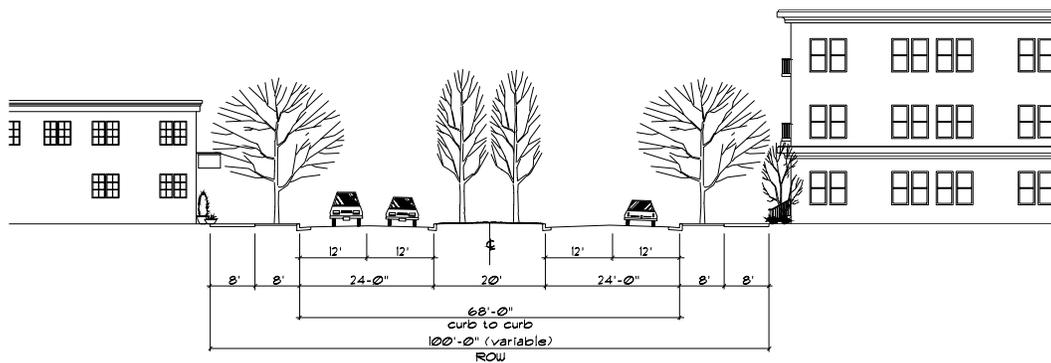
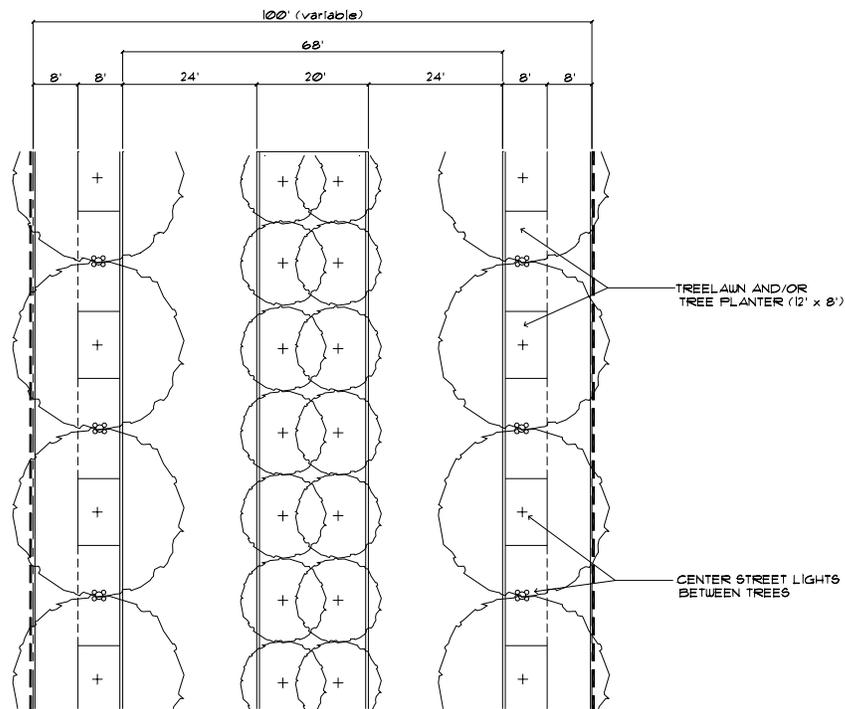
Collector Street with Diagonal Parking

Mixed Use Development Entry Spine Street

Purpose	Entry/Spine Streets provide the main access from arterial streets, including right-in/right-out and serve as a focus of activity for large mixed use centers.
Right-of-Way	100'
Street Width	68' flow line to flow line
Number of Travel Lanes	2 or 4
Median Type	Raised
Median Width	Minimum 20'
Parking	Yes/Optional
Maximum Daily Traffic Volumes	7,500
Minimum Horizontal Radius	700'
Block Length	600' max.
Alley	optional
Tree Lawn Width	8'
Sidewalk	8'
Bike Lane	6' Optional
Functional Classification	Major Collector
Miscellaneous	Transit stops shall be accommodated where appropriate (at 800' - 1200')



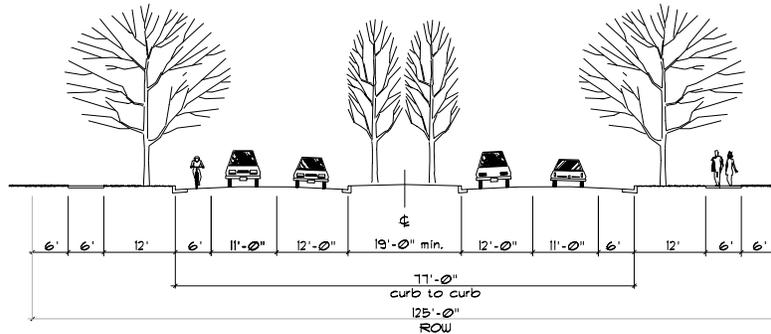
Entry Spine Street with Bicycle Lane and Parking



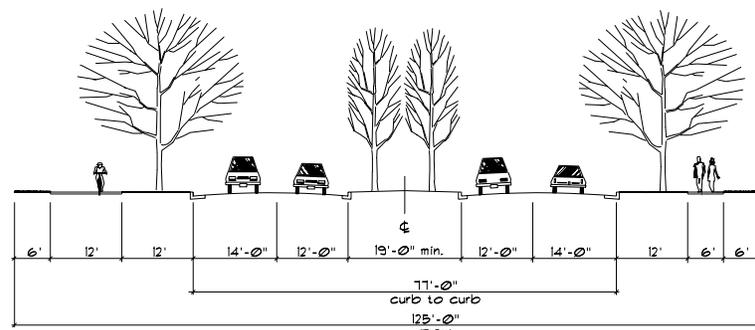
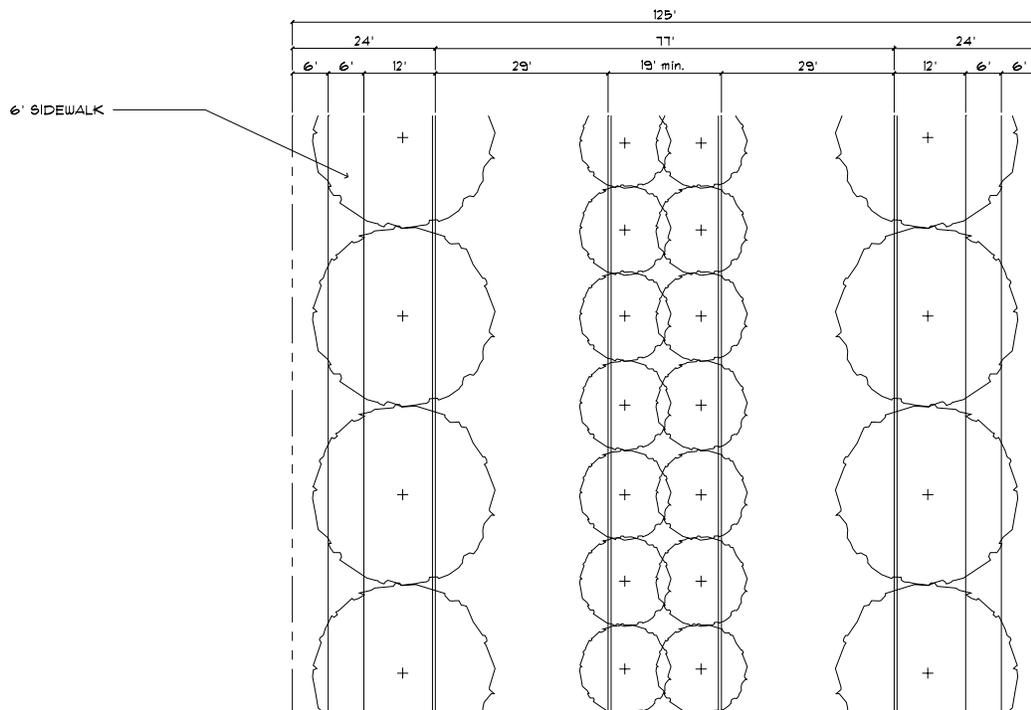
Entry Spine Street with No Parking

Mixed Use Development Parkway – 4 Lane

Purpose	Parkways provide rapid and relatively unimpeded traffic movement throughout the City and carry high volumes of traffic to mixed use centers.
Right-of-Way	125'
Street Width	77' Standard or 71' with Optional Trail flow line to flow line
Number of Travel Lanes	4
Median Type	Raised
Median Width	Minimum 19'
Parking	None
Maximum Daily Traffic Volumes	25,000
Tree Lawn Width	12'
Minimum Horizontal Radius	700'
Block Length	n/a
Alley	optional
Sidewalk	6'
Multi-use Trail	12' Optional
Bike Lane	6' Standard
Functional Classification	Minor Arterial
Miscellaneous	Transit stops shall be accommodated where appropriate (at 800' - 1200')



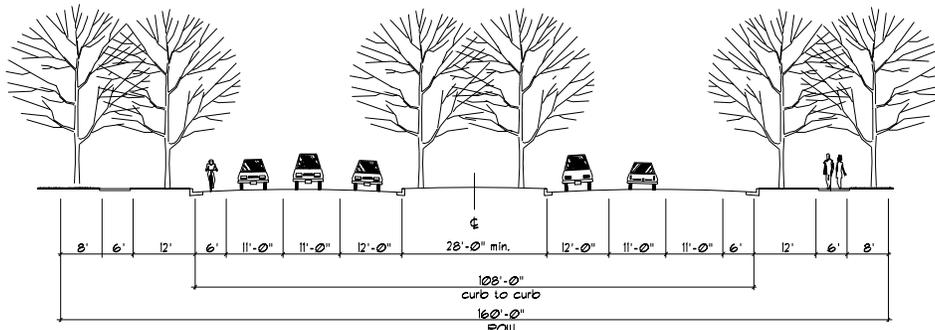
Parkway with On-street Bike Lane



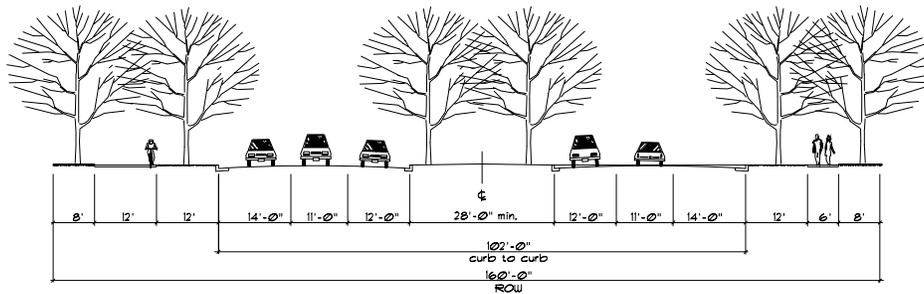
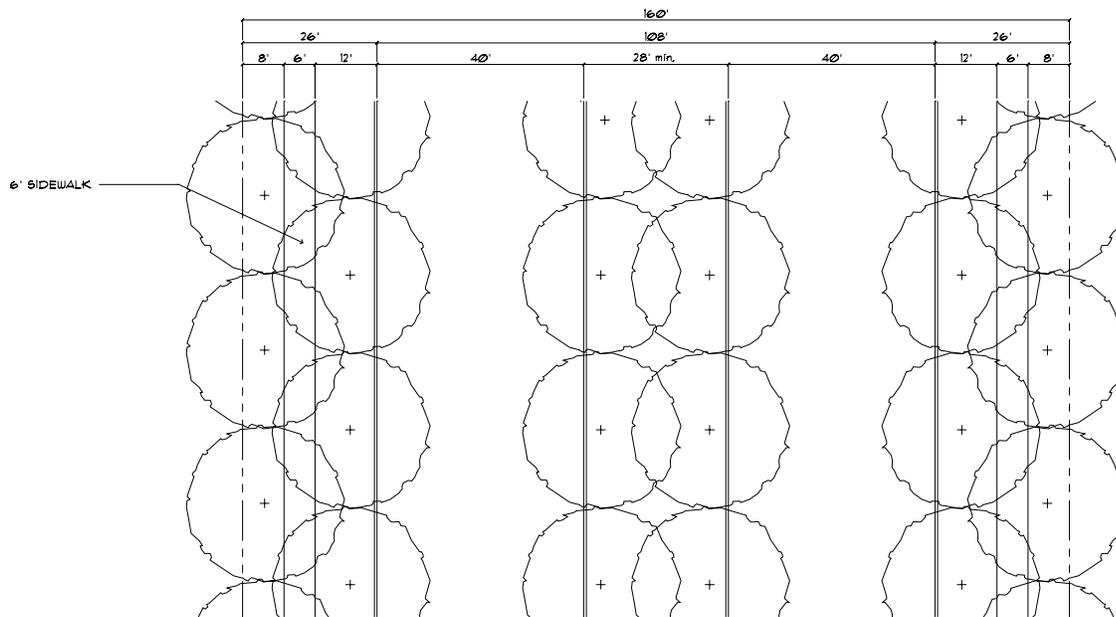
Parkway with 12' Trail

Mixed Use Development Parkway – 6 Lane

Purpose	Parkways provide rapid and relatively unimpeded traffic movement throughout the City and carry high volumes of traffic to mixed use centers.
Right-of-Way	160'
Street Width	108' Standard or 102' with Optional Trail flow line to flow line
Number of Travel Lanes	6
Median Type	Raised
Median Width	Minimum 28"
Parking	None
Maximum Daily Traffic Volumes	36,000
Tree Lawn Width	12'
Minimum Horizontal Radius	1100'
Block Length	n/a
Alley	optional
Sidewalk	6'
Multi-use Trail	12' Optional
Bike Lane	6' Standard
Functional Classification	Principle Arterial
Miscellaneous	Transit stops shall be accommodated where appropriate (at 800' - 1200')



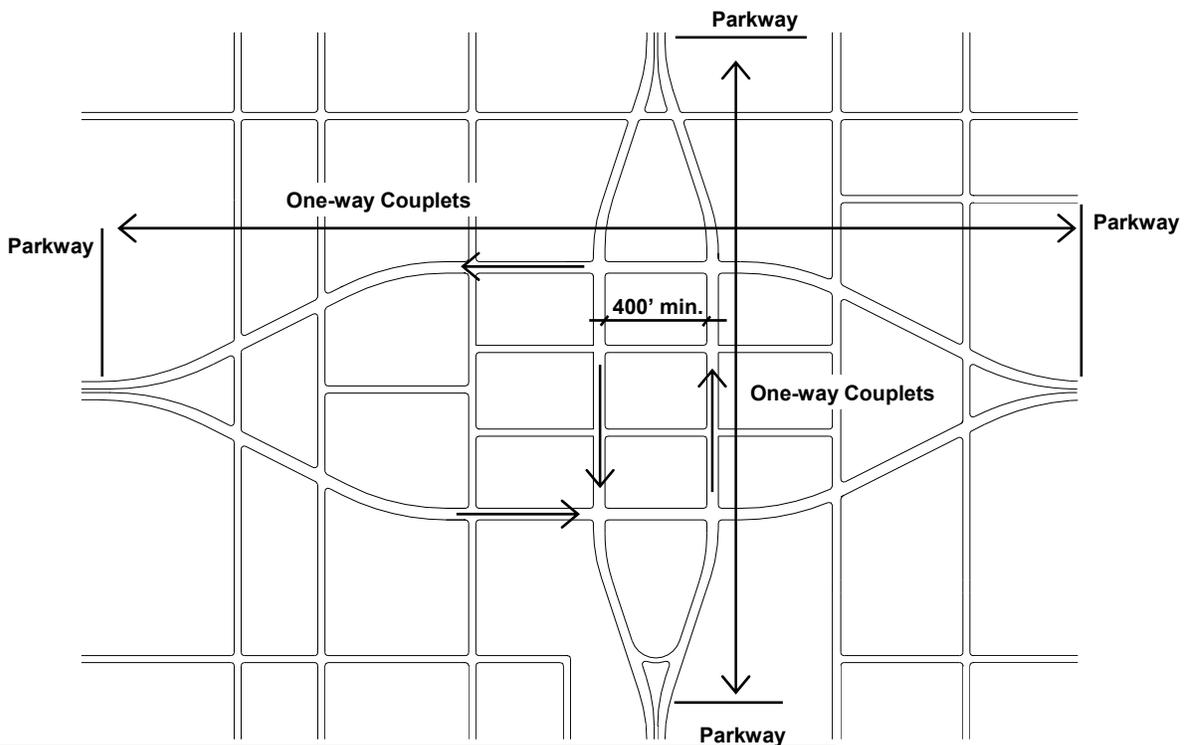
Parkway with On-street Bike Lane



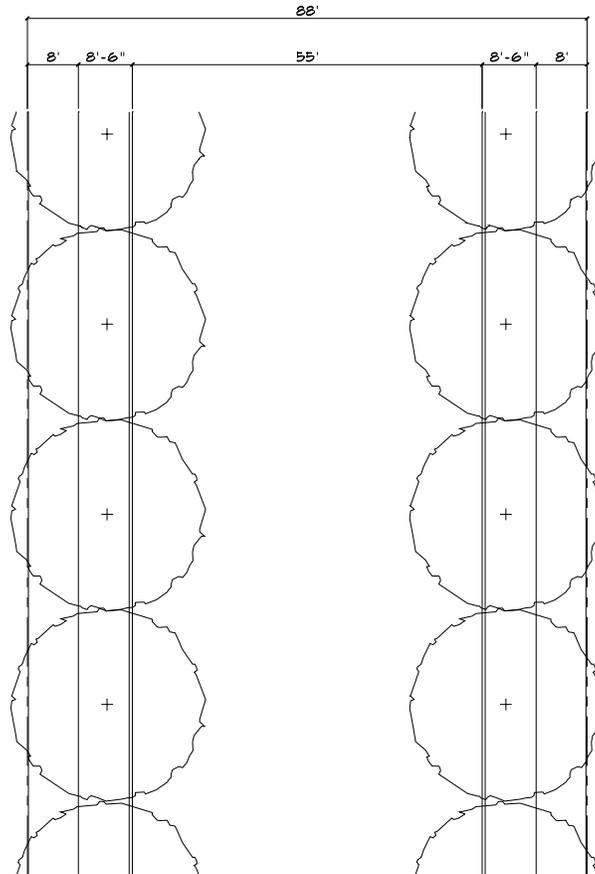
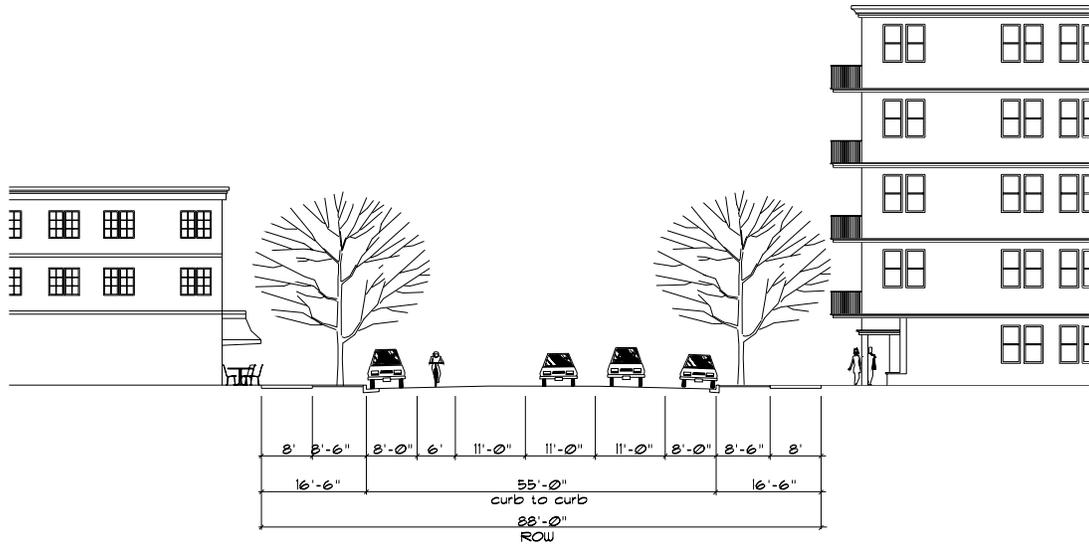
Parkway with 12' Trail

Mixed Use Development– One Way Couplet

Purpose	One-way couplets carry high volumes of traffic from a 6-Lane Parkway through mixed use centers by splitting the Parkway as it approaches the center into couplets of one-way streets and then rejoining them on the other side. The intersection of two set of intersecting couplets forms the framework of a street grid for the center, minimizes pedestrian crossing distances at intersections and decreases average travel times through the center.
Right-of-Way	88' each
Street Width	55' from flow line to flow line each
Number of Travel Lanes	3 each
Median Type	None
Median Width	N/A
Parking	Yes– parallel on both sides of street
Maximum Daily Traffic Volumes	18,000 each
Tree Lawn Width	8'-6"
Sidewalk	8'
Bike Lane	6' Standard
Multi-use Trail	Optional – Off-street multi-use trail separates from right-of-way where couplet splits.
Miscellaneous	Transit stops shall be accommodated where appropriate (at 800' - 1200')

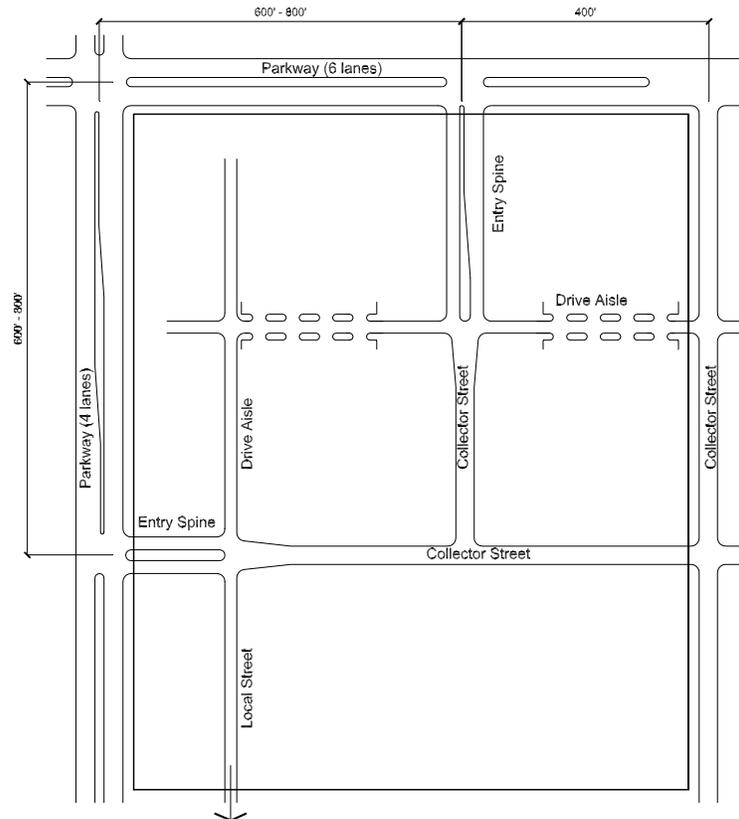


Block Structure– One way Couplet

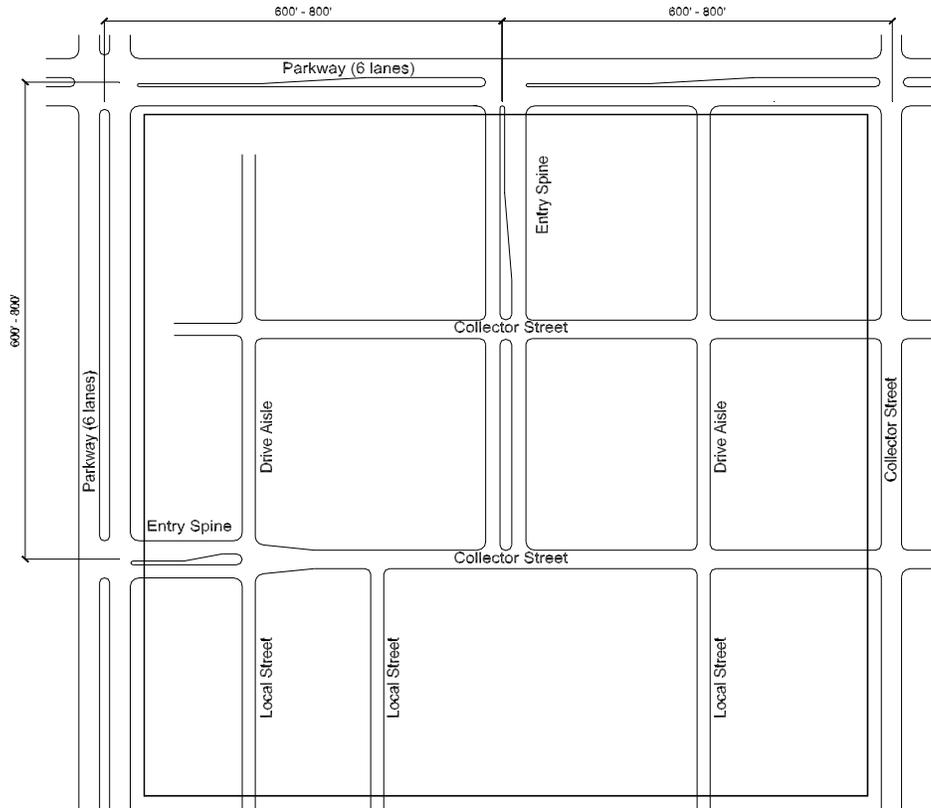




Block Structure– MU Neighborhood Center



Block Structure– MU Commercial Center



Block Structure— MU Regional/Employment Center

VI. Utility Guidelines

The design of a mixed use development (MU) is to occur in a comprehensive manner, where land uses, site layout, utility corridors, landscaping, lighting and other infrastructure are designed in concert with one another. This will especially apply to utility design work, where advance planning and layout will facilitate construction, operation and maintenance, both from a functional and aesthetic standpoint.

General Utility Considerations

The Colorado Springs Utilities ("Springs Utilities") provides the community of Colorado Springs with electric, gas, water and wastewater service. To accommodate and support MU development, guidelines have been developed for utility placement and design. In addition, Springs Utilities publishes the "Colorado Springs Utilities Site Design Guidelines" which provides details regarding site improvements and landscaping requirements within rights-of-way and utility corridors and easements. This information is for general planning purposes only, and does not supersede applicable City or Springs Utilities codes, tariffs, service standards, specifications, or safety codes. Due to the nature of MU development, utility design is expected to be site specific. Developers are encouraged to contact Springs Utilities in the earliest phase of the project to discuss options for utility connections and placement.

The MUD street types, rights-of-way widths and associated corridors and easements allow for most typical site layouts and utility infrastructure. Additional utility easements may be required by Springs Utilities as necessary to accommodate the final utility infrastructure and to meet access requirements of the mixed use development. The developer typically dedicates such easements using a standardized Springs Utilities permanent easement agreement form and process.

Details regarding line extension and service standards, easements, and other available services can be found at the Springs Utilities web site at www.csu.org. Select Residential Services or Business Solutions from the main menu and then click on Utilities Development Services for a list of available documents and services.

General Utility Guidelines

The following design guidelines are recommended for a MU development:

A. Supply

1. When submitting the Mixed Use Concept Plan the following information shall be provided:
 - a. A plan identifying the points of interconnection for water, wastewater, gas, and electric.
 - b. A map showing the general corridor and initial layout for each utility.
 - c. Demand calculations for each utility under full build-out conditions.
 - d. A summary describing current utility infrastructure in the area of development. This summary shall include the age and condition of the infrastructure, and any proposed modifications (including relocation and replacement). Capacity issues shall also be identified, including any impacts on existing infrastructure. Utility services may be capacity limited due to existing infrastructure. Utility services are provided to eligible customers at the time of connection to the distribution system on a "first come, first served" basis in accordance with Springs Utilities' tariffs.
2. Springs Utilities will determine if existing mains may or may not be adequate to meet current or proposed uses. Modification of existing utility lines used to support the new development, if required due to capacity limitations, age or condition, shall be at the developer's expense.
3. Fire service and hydrant lines installed for commercial or multi-family residential use require independent connections to the water mains.
4. Where available, non-potable water should be used for landscape irrigation. Springs Utilities encourages the extension of non-potable waterlines and the use of non-potable water for irrigation.
5. Consideration for wastewater hydraulics should be included in the Mixed Use Concept Plan. Modifications of existing infrastructure to achieve the required flow rate should be at the developer's expense.
6. Private main agreements may be required for parcels with limited access to public facilities.
7. A Utilities Addressing Plan (UAP), along with a Utilities Design Cad File (UDCF), will be required when a request for service is submitted to Springs Utilities in accordance with Appendix B of the *Line Extension & Service Standards* manuals.

B. Metering

1. Meter Locations

- a. Preferred locations for electric, gas and water meters shall be identified in the Mixed Use Development Plan. Guidelines for location of meters can be found in the Line Extension and Service Standards manuals
- b. Concrete-filled guard posts shall be installed in front of gas and electric meters in accordance with Appendix E of the Springs Utilities' Line Extension & Service Standards – Gas manual to provide protection from vehicular traffic.
- c. Proper clearance between gas meters and electrical equipment and transformers shall be provided in accordance with the Springs Utilities' Line Extension & Service Standards - Gas manual.
- d. Large gas and water meters shall have vehicular access for installation and service of meters.
- e. Openings into structure/residence from adjacent gas meters require a minimum of three feet clearance from vents, doors, windows, intakes, etc.
- f. Water meters installed inside a residence or business shall have a low voltage wire run from the meter location to a remote reader to be located outside the building.
- g. Floor drains need to be installed within five feet of any indoor water meter location.
- h. Individual shut off valves (curb stop) must be provided to isolate each Springs Utilities-owned meter. Curb stop box lids need correct address tags.

2. Meter Accounts

- a. Commercial and residential meters require separate billing accounts.
- b. Separate meters shall be required for landscape irrigation associated with commercial accounts.
- c. Each business or residence shall have its own gas, water, and electric meter.

C. Utility Access

1. Access to utility infrastructure is of prime importance and shall be maintained to Springs Utilities' standards for all public streets and utility easements.
2. Adequate access shall be provided to all electric,

gas and water meters, to all vaults and valves, and to all sewer manholes.

3. Avoid locating sewer manholes, electric transformers or meters in narrow or dead-end streets.
4. Avoid routing utilities under streets with specialty paving that increases the complexity and expense of utility repairs.
5. All utilities shall be installed with adequate vertical and/or horizontal separations to facilitate access and maintenance. Please refer to current *Springs Utilities' Line Extension & Service Standards* manuals for detailed requirements.

D. Utility Easements

1. The initial Mixed Use Concept Plan should show all proposed rights-of-way and utility corridors and easements.
2. Easements shall be provided for all public water lines and hydrants not located in a public right-of-way. Changes in location of utilities or final transformer, fire hydrant or meter locations may require granting of additional easements.
3. All utility easements where access by Springs Utilities vehicles may be required shall be constructed to an HS 20 wheel loading standard.

E. Street Lighting

1. Street lighting systems, when provided, should be located in the utility corridor of the tree lawn area of the ROW. To the extent possible, public streetlights should be limited to public roadways and utility easements in private roadways. Public streetlights should be avoided on private property, unless installed under Springs Utilities Security Lighting policy set forth in Section 12.02 of the *Line Extension & Service Standards-Electric* manual.
2. Public street lighting should be installed and maintained by Springs Utilities. All other lighting for on-site streets, pedestrian walkways, bikeways and parking lots should be installed and maintained by the developer. The options for public street lighting are shown in Section 17 of Springs Utilities' *Distribution Construction Standards – Electric*. The spacing, location, height, fixture style, light source and level of illumination shall be subject to the standards and review of Springs Utilities. Other types of light poles or luminaires/fixtures may be installed, subject to the approval of Springs Utilities.
3. Streets with trees on a center median may be lighted with twin davit bracket arms located in the median or with single davit bracket arms located on both sides of the street.

F. Landscaping

1. Landscaping and fences in utility easements shall meet the criteria as established in the "Colorado Springs Utilities Site Design Guidelines". No trees shall be placed within 15 feet of the centerline of any wet utility.
2. Springs Utilities' main and service lines that run under decorative rock, landscaping, or specialty paving may be required to be sleeved or encased to protect the integrity of the main and service lines and minimize damage to landscaping in the event of required maintenance.

G. Cable & telecom

1. Cable and telecommunications facilities may be included in joint trenches, subject to the agreement of Springs Utilities and the other utility.

H. Storm water drains

1. To the extent known or anticipated, proposed storm water drains that would be located in a street right-of-way or utility easement should be shown on the Mixed Use Concept Plan.

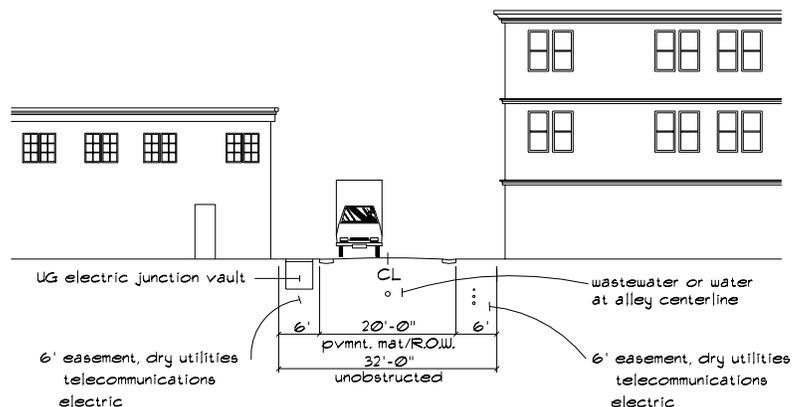
ALLEY

The alley design allows for a combination of wet and dry utilities, dependent upon the adjacent street type and need for utility service.

Guidelines

The following design guidelines are recommended for a MU Alley:

1. A six (6) foot dry-utility easement should be provided along both sides of the MU alley right-of-way.
2. When located in alleys, dry utilities should be placed in common trenches within the utility easement.
3. Alleys should normally contain no more than one wet utility.
4. Wastewater lines, located along the centerline of an alley, may be permitted in alleys that are 400' or less in length, if approved by Springs Utilities. Water lines in alleys are not restricted by alley length.
5. Direct access from the alley to utility improvements should be provided.
6. Paving within any utility easement should be permitted only to provide access to garages and adjoining parking spaces.
7. Landscape materials allowed within the easements should be groundcovers, annuals, perennials or shrubs (no more than ten (10) feet in height and no more than six (6) feet in width) conforming to "Colorado Springs Utilities Site Design Guidelines".
8. No parking spaces shall be allowed within the 30-foot unobstructed area.
9. Any utilities that may be subject to damage from vehicles shall be appropriately protected.
10. Wet utilities should not be located in alleys unless approved by Springs Utilities.
11. No water or wastewater facilities shall be placed in alleys with inverted crowns.



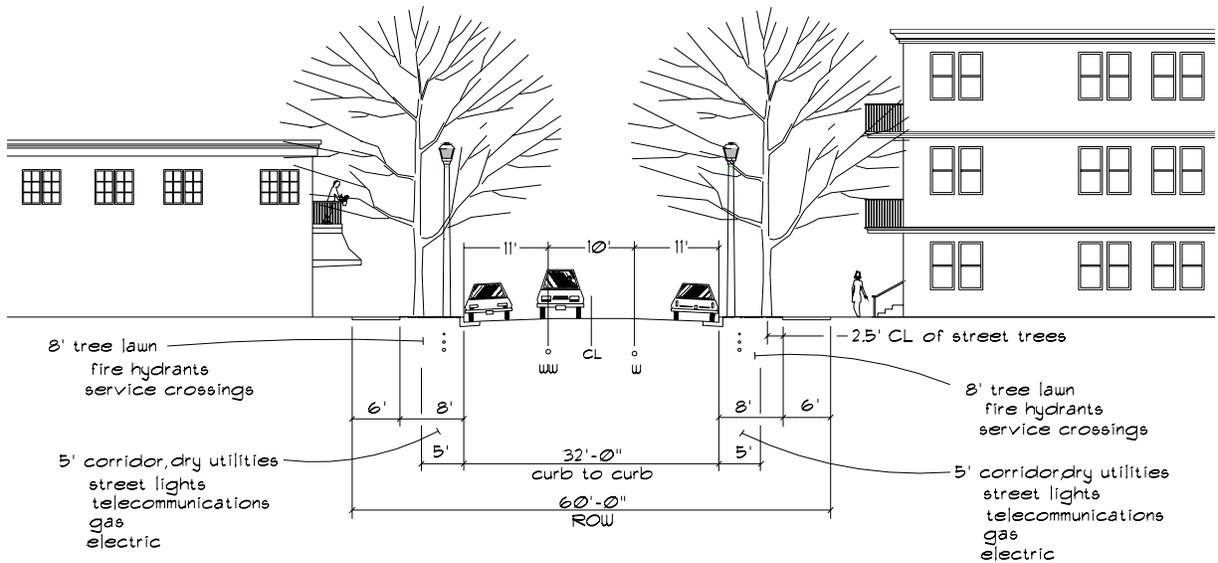
LOCAL STREET

The Local Street is designed to serve the local access needs of residential, live/work, and commercial activities within a mixed use center.

Guidelines

The following design guidelines are recommended for a MU Local Street:

1. A five (5) foot dry-utilities corridor should be provided along both sides of the Local Street curb. The corridor may not be required if all dry utilities are located in an alley or other street.
2. Both wet utilities may be located in the street. If an alley is provided, one wet utility may be placed in the alley, subject to Springs Utilities' approval.
3. Streetlights should be placed in the dry utilities corridor on either side of the street.

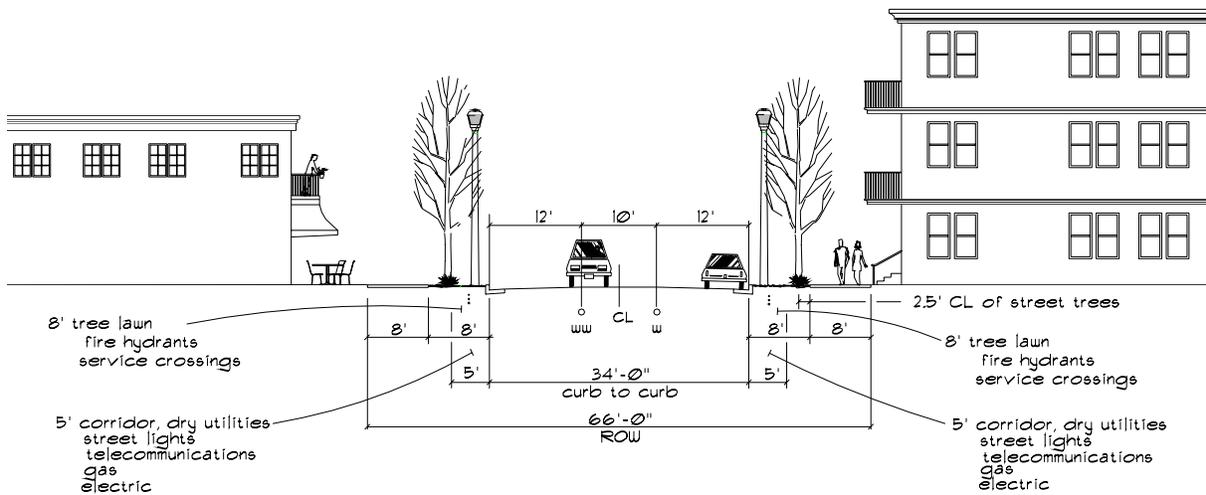


COLLECTOR STREET

The Collector Street provides access from adjacent arterial streets into the mixed-use activity center and serves as a non-arterial perimeter street.

Guidelines

1. A five (5) foot dry-utilities corridor should be provided along both sides of the Collector Street curb. The corridor may not be required if all dry utilities are located in an alley or other street.
2. Both wet utilities may be located in the street. If an alley is provided, one wet utility may be placed in the alley, subject to Springs Utilities approval.
3. Streetlights should be placed in the dry utilities corridor on either side of the street.

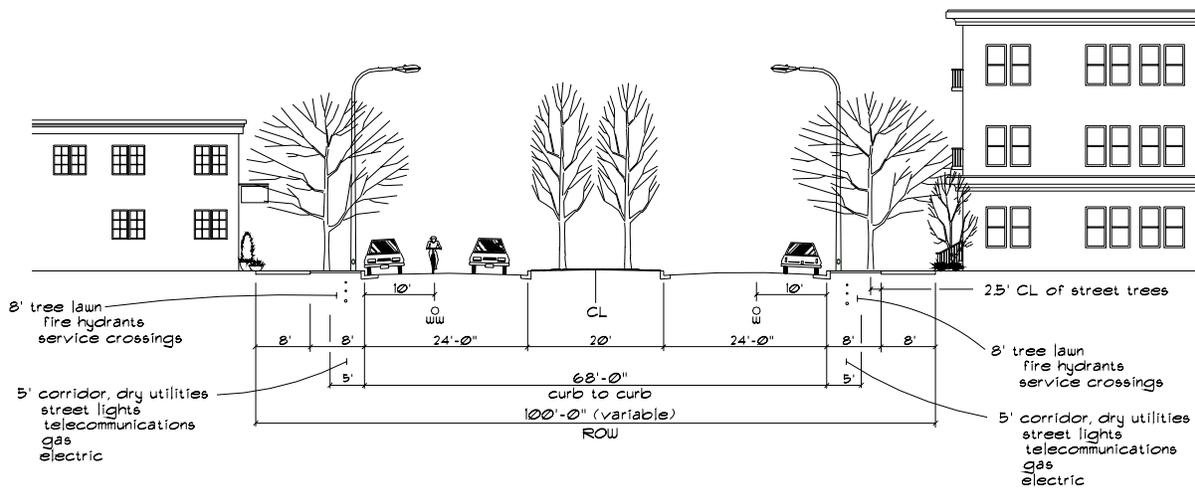


ENTRY/SPINE STREET

The Entry/Spine Street provides the main access from arterial streets, including right-in/right-out and serves as a focus of activity for large mixed use centers.

Guidelines

1. A five (5) foot dry utilities corridor should be provided along both sides of the Entry/Spine Street curb.
2. Wet utilities should be located within the paved area.
3. Gas lines are commonly located in the paved area while dry utilities are located back of the curb in the dry utilities corridor.

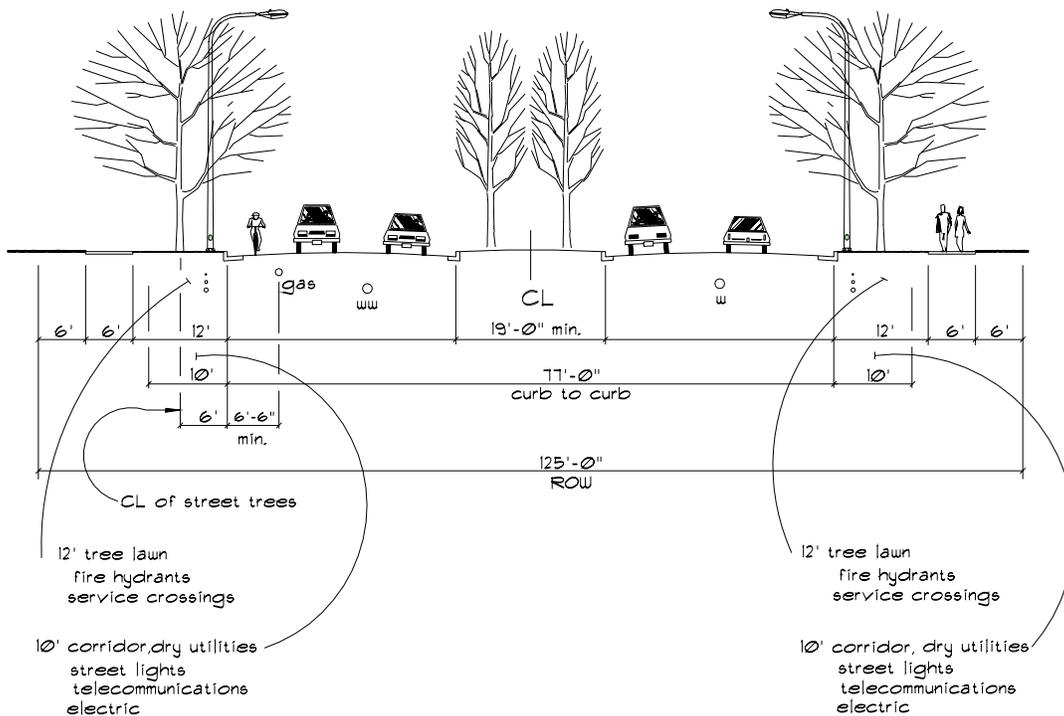


PARKWAY – 4 LANE

Parkways provide rapid and relatively unimpeded traffic movement throughout the City and carry high volumes of traffic to mixed use centers.

Guidelines

1. Wet utilities should be located within the paved area. Water and wastewater lines may be placed in the center of the same street with a ten (10) foot separation.
2. Gas lines are commonly located in the paved area while dry utilities are located back of the curb in the dry utilities corridor.

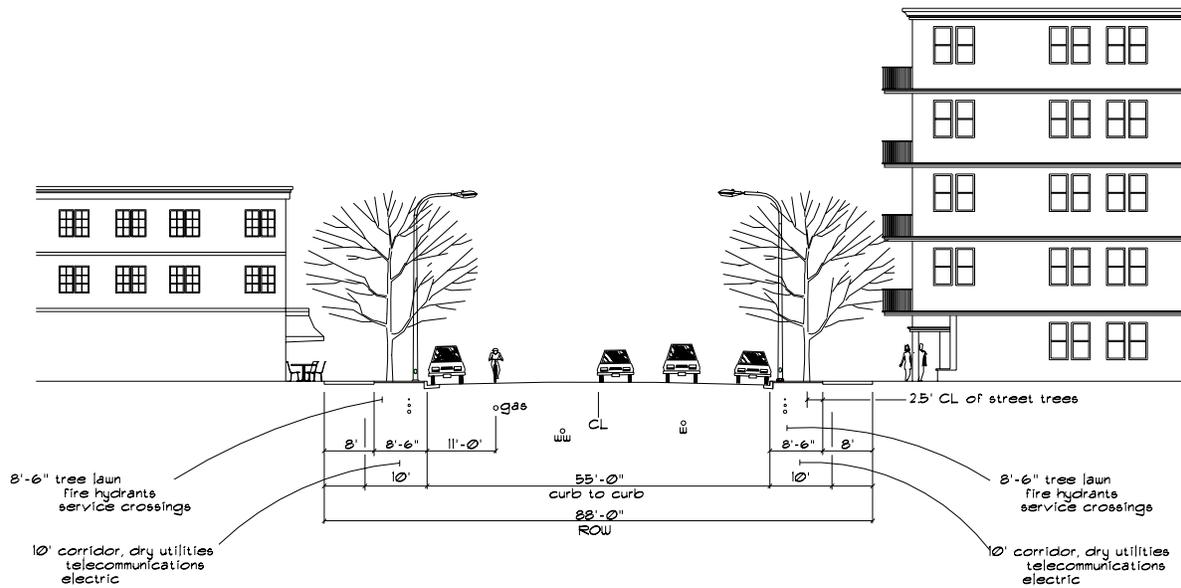


ONE-WAY COUPLET

One-way couplets carry high volumes of traffic from a 6-Lane Parkway through mixed use centers by splitting the Parkway as it approaches the center into couplets of one-way streets and then rejoining them on the other side. The intersection of two set of intersecting couplets forms the framework of a street grid for the center, minimizes pedestrian crossing distances at intersections and decreases average travel times through the center.

Guidelines

1. Wet utilities should be located within the paved area with a ten (10) foot separation.
2. Gas lines are commonly located in the paved area while dry utilities are located back of the curb in the dry utilities corridor.



VII. Drainage Standards

The City of Colorado Springs *Drainage Criteria Manual* does not provide graphical solutions for drainage capacities in mixed use streets. The design engineer shall compute allowable flow capacities and allowable flow depths for mixed use streets using equivalent criteria in the *Drainage Criteria Manual* and the following guidelines. Unless otherwise noted herein, the *Drainage Criteria Manual* shall apply:

1. Vertical curbs shall be used on all mixed use streets, including curb returns. City Standard 8-inch vertical curb is required except where 6-inch vertical curb is desired to create a more traditional or aesthetic appearance. Storm sewer inlets must be placed where the allowable street flows are exceeded. Street capacities are reduced when using 6-inch curb which may result in additional storm sewers.
2. For Local and Collector Streets the initial storm (5-year) flow must not cross the street crown from one side to the other. There must be at least two inches (2") of freeboard at the curb. The major storm (100-year) flow must not exceed twelve inch (12") depth at the gutter and must not flood adjacent property or buildings.
3. For Entry/Spine Streets and Parkways the initial storm flow spread must not encroach beyond the outside travel lane. Major storm flows must be confined in the street section while preserving one drivable lane in each direction.
4. Storm flows in alleys shall be limited to the flows generated from the rear of the lots adjoining the alley. Alley flows shall not cross the intersecting streets into another alley but shall be captured or diverted at the intersecting street.
5. Flow spread in alleys shall be confined to the right-of-way at reasonable and safe depths. All "vee-shaped" shaped alleys must have concrete surfaces. Asphalt alleys may be crowned or cross-sloped with a concrete gutter along the edges that carry storm flows.
6. Alternatives to City Standard inlet types (such as combination castings) are encouraged to provide a more traditional appearance subject to City Engineer approval. Slotted drains are prohibited.
7. Special design features such as curb extensions and speed tables will require special drainage design consideration.

8. The drainage design engineer is alerted to the challenge of finding a suitable location for storm sewer mains in mixed use streets especially if the street is narrow and other utility lines are present.

VIII. Putting It All Together

Introduction

This section uses a typical layout for a mixed use commercial center to demonstrate how the various zoning provisions, standards, and guidelines contained in this *Design Manual* can be applied in concert to a mixed use development. Given the potential range of site sizes, conditions, locations, contexts, uses, intensities, building types, and transitions, there is no limit to the possible variations in layouts of mixed sites under the three MU zone districts. The purpose of this hypothetical design is to take just one possibility as an illustrative example for applying specific code sections, design standards, and guidelines within the context of a unified site plan for a mixed use development. In other words, it presents a whole picture in order to break out the various parts and show how they work together.

The presentation is organized around three plan graphics of the hypothetical site layout (Figures VII.1, VIII.2, and VIII.3). Three conceptual renderings are also included to give a sense of the character of the development (Figures VIII.4, VIII.5, and VIII.6). Relevant references to the Zoning and Subdivision Codes and to sections of this *Manual* are displayed in the margins.

Size, Location, Context, Access, and Connections

Several considerations come into play before the internal layout of a mixed use site can be decided. Size, location, and context are key factors in determining if mixed use zoning is appropriate for the site, and if so, which mixed use zone district may work best for it and how the site will need to fit in with its surroundings. Points of access and connections are a function of the perimeter street types, the intersection spacing, and the surrounding uses and block structure. They also play a large part in determining what the internal block structure of the site will be. Figure VIII.1 illustrates these preliminary considerations for a 36.5 acre site suitable for Mixed Use Commercial Center (MU-CC) zoning. The features surrounding the site may be existing or planned or a combination of the two. Similarly the context may be infill, redevelopment, developing area, or greenfield. In general, the less developed the surrounding context, the more options there are for a developer to work a mixed use development into the surrounding fabric.

Zoning Code:	7.3.703 7.3.705 7.4.903
Design Manual:	III.A. Zone Districts III.B. Establishment of Contextual Areas in City IV.B. Street System Design V. Street Standards

Example Site Layout

Figure VIII.2 depicts an example layout for a mid-size mixed use commercial center on the 36.5 acre site. Building types/uses are denoted with the letters (A) through (G). Subareas and special features are labeled with the numbers [1] through [8]. Basic site data is presented on the accompanying page. In what follows, the key elements of the overall site design are discussed with reference to the annotated uses, buildings and subareas.

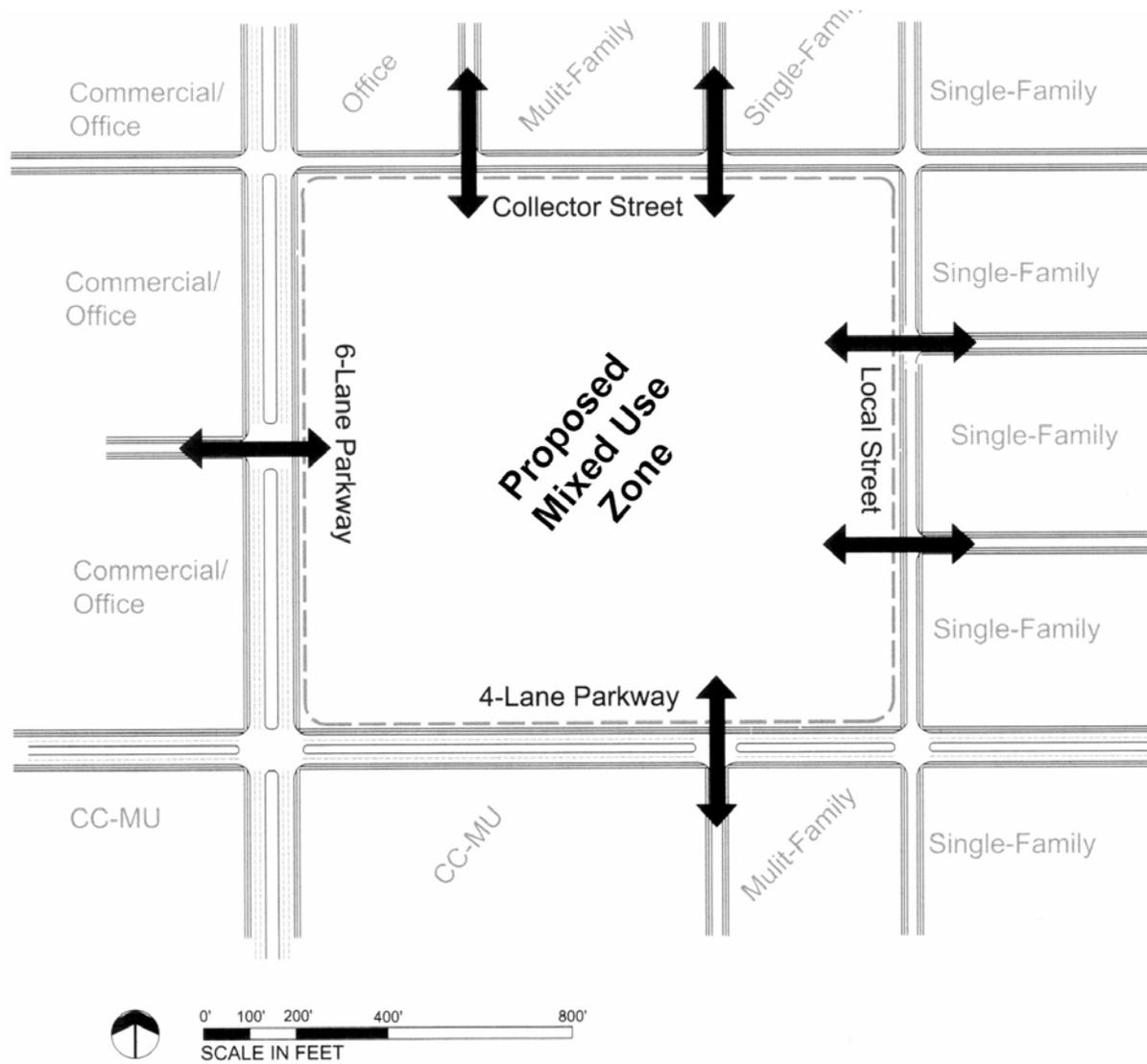


Figure VIII.1--Context and connections

Table 6 Site Data for Example Layout

Site Area	36.5 acres		
Zoning	Mixed Use Commercial Center (MU-CC)		
Floor Area Ratio	3.9		
Residential Density	9.87 units/acre (148 units on 15 acres of residential area)		
Buildings by Type	Uses	Gross Square Feet Floor Area	Residential Units
A	Grocery/Retail	72,000	
B	Restaurant	13,800	
C (2-story)	Commercial/Office	178,400	
D	Neighborhood Commercial	48,500	
	Subtotal Nonresidential	312,700	
E (2-story)	Live/Work	57,600	32
F (2-story)	Town House	177,660	94
G.	Duplex	22,000	22
	Subtotal Residential	257,260	148
	Total	569,960	
Parking	Spaces Required	Spaces Provided	
Off-street			
Non Residential (shared)	1042 (@1 sp/300 GSF)	1528	
Residential (dedicated)	296 (@2 sp/unit)	323	
On-street		188	
Total	1,338	2,039	
Off-street Parking Ratio for Nonresidential Uses		4.9 spaces/1000 GSF or 1 space/205 GSF	

Zoning Code:	7.3.704 7.3.706
Design Manual:	III.E. Uses IV.A. Development (Dimensional) Standards

Mix of Uses

The development program for the site is outlined in the Site Data. It is anchored by a 72,000 square-foot grocery/retail store, and includes a mix of retail, commercial, service, office, live/work and residential uses. Buildings labeled as (C) are two-story with retail uses primarily on the first floor and offices and services on the second. The buildings labeled (B) are freestanding restaurants, and those marked (D) are more neighborhood oriented services, such as day care facilities and personal services. The residential uses are mixed horizontally on the site, transitioning from live/work units (E) to townhouses (F) to duplexes (G). The method used to mix residential uses on a site is driven by con-

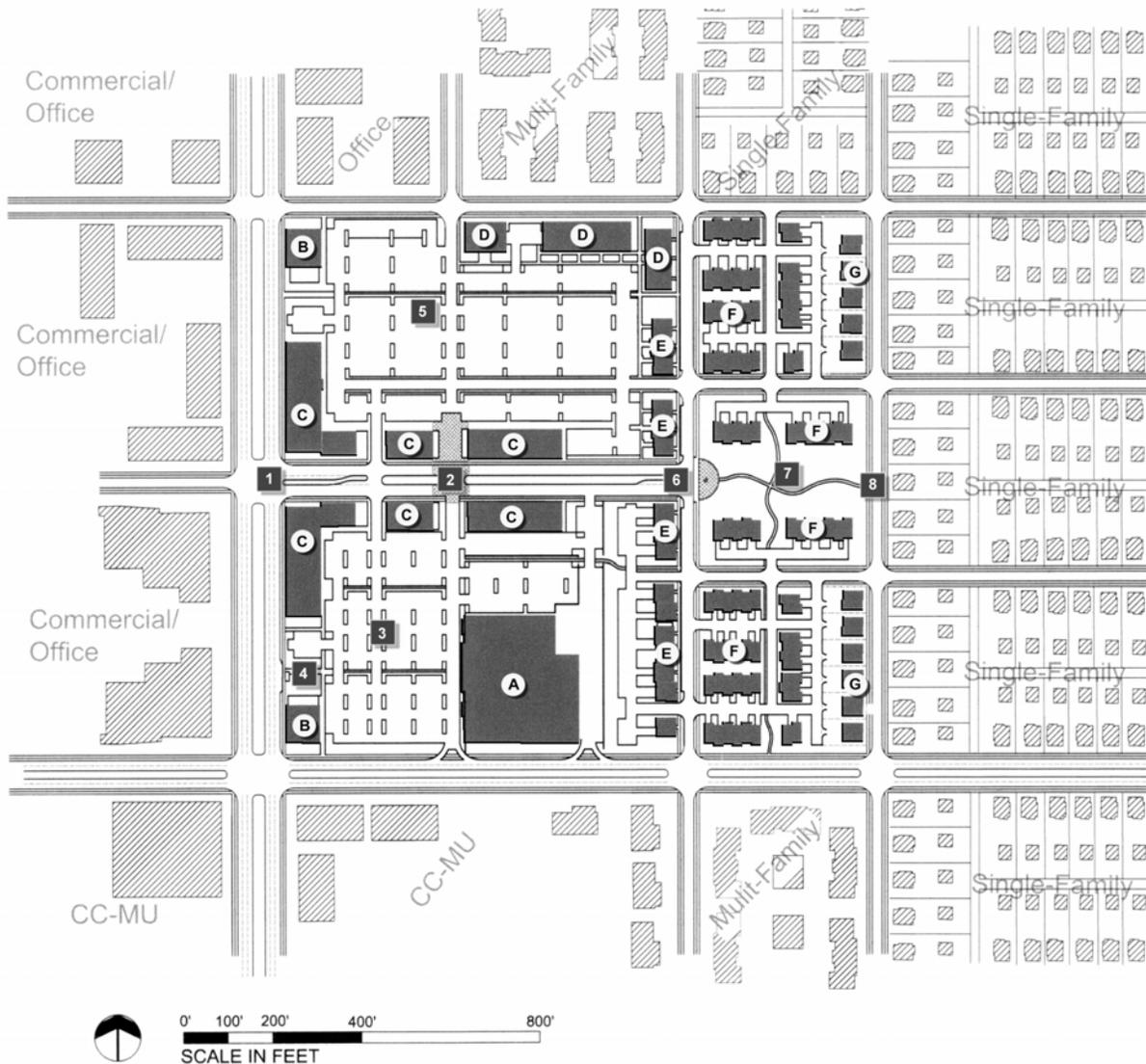


Figure VIII.2—Example site layout

siderations of the market in a given context and the ability to provide a quality, marketable residential environment. In a more urban context, such as a downtown or a large, regional town center, with blocks of multi-story buildings and structured parking, the feasibility of incorporating upper floor residential in vertically mixed use buildings increases. In this example, residential loft units could be incorporated in the two-story buildings depending on the particular market and the quality of the residential units, parking design, and the street environment.

Block Structure and Street Network

Building upon the options for access and connectivity to the site shown in Figure VIII.1, and taking into con-

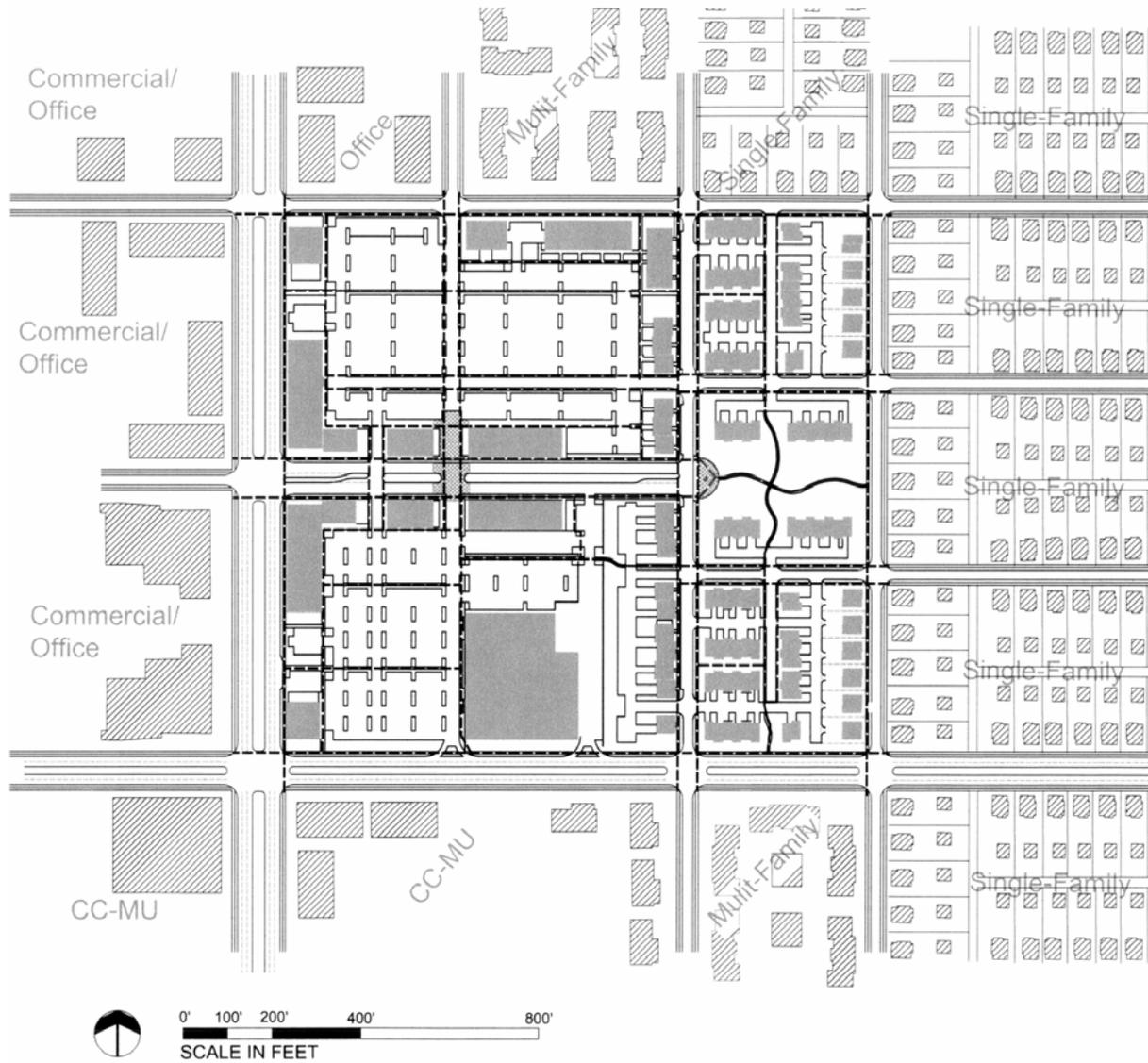


Figure VIII.3—Pedestrian circulation

Zoning Code:	7.4.1203 7.4.1204 7.4.1205
Design Manual:	IV.B. Blocks, Buildings and Street Network Blocks

sideration the development program, the uses, and the perimeter streets, the internal block structure and street network can be laid out. Subarea [1] shows the major entrance from the six-lane parkway along the west side of the site, with the entry/spine street continuing through as the primary internal pedestrian focus. The long, six hundred (600) foot blocks along the six-lane parkway are broken up with pedestrian pass-throughs between buildings that continue on to pedestrian walkways through the parking areas. On the south side of the site, the block faces along the four-lane parkway are broken into four hundred (400), three hundred (300), and two hundred (200) foot segments by the right in/right out access points on either

side of Building (A) and a collector street that provides access into the residential area between Buildings (E) and (F). On the north side of the site, the block faces along the perimeter collector street are broken into four hundred (400), five hundred (500), and again four hundred (400) foot segments by access via an enhanced drive aisle and intersecting collector and local streets. The residential blocks along the east side of the site are four hundred (400) foot square fronting on the perimeter and internal local streets. The parking lots in subareas [3] and [5] are intersected by enhanced drive aisles to create internal parking blocks.

Building Placement and Parking

Building placement within the block and street structure is based on considerations of size, use, type, parking, and streetscape. Building (A) was located to take advantage of a large parking area to serve it, good visibility from the perimeter parkways, and service and delivery access. With less than fifty (50) percent building wall frontage along the four-lane parkway, the build-to line is set at twenty-five (25) feet. Buildings (C) frame the entrance and the entry/spine streetscape to create a viable pedestrian realm, while Buildings (B) capture the corners. See Figure VIII.4 for a conceptual view of the entry/spine street. The remaining buildings are placed to support a pedestrian oriented streetscape along the perimeter and internal collector and local streets. All buildings are placed so as to frame and internalize the surface parking areas to the greatest extent possible and provide convenient and efficient access and egress for the parking areas.

Dealing effectively with large surface parking areas on mixed use sites requires a high degree of creativity from the designer. Where land values or individual users will not support structured parking, shared parking and on-street parking become valuable tools. Approximately 188 on-street parking spaces are available along the internal and perimeter collector and local streets. The off-street parking in this example assumes two dedicated parking spaces per residential unit, with 27 additional spaces provided for the live/work units. Surface parking for all other uses on the site is provided at a ratio of approximately 4.9 spaces per 1,000 gross square feet of floor area. In order to maintain a pedestrian-friendly environment and connections through the large parking areas, subareas [3] and [5] are intersected by a combination of enhanced drive aisles and pedestrian walkways and generously landscaped with parking lot and street trees in the numerous planting islands, fingers, and

Zoning Code:	7.4.205 S.
Design Manual:	IV.E. Parking Onsite, Off-street Surface

Zoning Code:	7.4.706
Design Manual:	IV.B. Blocks Building Entrance Orientation Site Design for Multiple Building Development

Zoning Code:	7.4.203 7.4.205 7.4.208 7.4.320
Design Manual:	IV.E. Parking IV.F. Landscaping



Figure VIII.4- View of entry/spine street

Zoning Code:	7.4.1103 7.4.1104
Design Manual:	IV.G. Context and Transitions Operational Compatibility Transitions Along the Public Right-of-Way

tree lawns.

Context and Transitions

Transitions to the surrounding context are accomplished primarily through similar type and intensity of uses, screening, and streetscapes. For the perimeter parkways and collector street bordering subareas [3] and [5], similar uses and similar building scales are combined with a pedestrian realm and streetscape on both sides of the streets to make the transitions to the surrounding areas. In these cases, the streetscape is designed to act as a seam. Between Building (A) and the live/work units in Buildings (E), a wall and a landscaped area is used to screen and buffer the service and delivery area of the grocery from the parking area of the live/work units. Finally, the transition from the primarily nonresidential to the residential portion of the site is made through a step down in residential use types and intensities and an open space amenity along the axis of the entry/spine street. The transition moves from [1], the entry point, to [2], a pedestrian plaza, to [6] a focal point at the "T" intersection, to [7] a park/open space amenity, to [8] a local street fronting on single-family detached houses in the adjacent traditional neighborhood development

zone. The use transition is from live/work units to townhouses, to duplexes, to single family detached. For a conceptual view from the park/open space back to-



Figure VIII.5—View from park/open space

ward the entry/spine street see Figure VIII.6.

Relationship of Mixed Use to Traditional Neighborhood Development Zoning

The transition from the Mixed Use Commercial Center zone (MU-CC) to the Traditional Neighborhood Development zone (TND) illustrates how the two zone districts can work in tandem. Land uses such as multi-family housing, open space, parks, and commercial and office uses in the mixed use center can be substituted for those required under the TND zoning as alternative compliance. Conversely, residential uses in the TND zone can be substituted for the required residential component of the mixed use zoning. Using the two zones together may be a convenient method of phasing a mixed use/mixed residential development over time with different builders.

Zoning Code:	7.3.102 7.3.708
Design Manual:	III.C. Incentives in the Mixed Use Zoning Districts III.D. Process Process and Criteria for Alternative Compliance

Pedestrian and Bicycle Access and Circulation and Transit

Figure VIII.3 depicts the pedestrian access and circulation system for the site in a series of dashed lines that outline the sidewalk and walkway connections. All uses can conveniently be accessed on foot. Uses on

Zoning Code:	7.4.703
Design Manual:	IV.C. Pedestrian and Bicycle Access, Circulation and Connections



Figure VIII.6—View Into site

the site are also fully accessible via the street network by an on-street bicycle system that runs on the entry/spine, collector, and local streets, with potential connections to off-street paths along perimeter parkways. Subarea [2] in Figure VIII.2 is a pedestrian plaza amenity that serves pedestrian activity along the spine street and creates convenient connections to the parking areas.

Zoning Code:	7.4.803
Design Manual:	IV.H. Transit V. Street Standards Alternative Modes—Transit Transit Standards

Subarea [4] in Figure VIII.2 shows the location of a transit stop to serve the mixed use center. The stop has a direct pedestrian connection to the grocery store and is combined with a pedestrian amenity and pedestrian connection into the site. See Figure VIII.5 for a conceptual view from the transit stop to the interior of the site.

Conclusion

The planning, design, development, and management of mixed use centers are obviously more complex than for conventional single-use projects. The different members of the project team, from land planners to architects, urban designers and engineers, must be closely coordinated, and in some cases, educated about a new development form. Mixed use development also calls for a higher degree of support and involvement from the public sector and greater cooperation between the private development industry and public officials. However, the long term benefits to both the private and the public sides can be substantial, particularly in a city like Colorado Springs.

As of June 2003, Colorado Springs had a total of 45,822 acres of vacant, developable land within the city limits. Of that, 11,309 acres were classified as infill land. Clearly, the potential exists to realize sizeable long-term gains in transportation, housing, infrastructure, and design by pursuing mixed use as the new pattern of development. This manual is meant to be a first step toward seizing that opportunity.

IX. Appendix

A. Definitions

ACTIVITY CENTER: "Activity center" is a general term for a MU development that integrates a range of complementary and mutually supporting uses and activities. Typically, an activity center includes a predominant type of use, such as commercial or employment-related, that is then supported by a mix of one or more other uses, such as residential, civic, or institutional. Activity centers may vary in size, intensity, scale, and their mix of supportive uses, depending on their purpose, location, and context. In each case, activity centers are intended to be mixed-use and pedestrian-oriented with good connections and transitions to surrounding areas. Residences are a component of all activity centers, whether on-site or immediately adjacent. The activity center should support a range of housing types and densities within the individual neighborhoods. There are three (3) distinct types of activity centers:

NEIGHBORHOOD CENTER: Neighborhood centers are small, low-impact, limited activity centers intended to primarily service the needs of immediately adjacent neighborhoods, in a service area typically ranging from one half ($\frac{1}{2}$) to two (2) miles. Principal uses contribute to the efficient functioning and attractiveness of neighborhoods, relate to and accommodate walk-up pedestrian traffic, and do not generate noxious fumes, excessive light or noise. The mix of uses may include neighborhood-serving retail, convenience or specialty food sales, restaurants, dwelling units above the first floor, live/work units, single-family attached dwellings, general offices, or medical offices.

COMMERCIAL CENTER: Commercial centers are activity centers that primarily accommodate large retail establishments, which may provide major durable goods shopping, and serve a number of residential areas over a significant portion of the city. Commercial centers contain a mix of supporting uses, including multi-family dwellings, office, entertainment and retail uses, medical offices and clinics, and civic uses. The mix enables combined trip destinations and supports more effective transit service, and provides viable pedestrian and bicycle access and circulation.

REGIONAL/EMPLOYMENT CENTER: A regional/

employment center is a large (fifty (50) or more acres), intensive activity center that combines the uses of commercial centers and employment centers and that serves the city and region as a whole. A regional activity center may be a regional shopping mall, corporate office headquarters, or a major concentration of employment supported by a mix of uses that meets the needs of employees, visitors and residents. Primary uses include major commercial and/or employment uses, supported by a full range and mix of uses including large and small retail establishments, general offices and office complexes, governmental and civic uses, business services, research and development, major service uses, restaurants, lodging, child care, personal services, and higher density housing, as well as warehousing and industrial uses or educational facilities. These centers are generally located at the intersection of or along major arterials, or in close proximity to limited access freeways and Interstate 25.

ALLEY: A public or private right-of-way, located at the rear or side of a property, designed for the special accommodation of the property it reaches, and not intended for general travel.

BIOSWALE: A landscape feature constructed of natural, water-permeable materials intended to channel and direct the flow of stormwater runoff.

BUILD-TO LINE: The line at which construction of a building façade is to occur on a lot. A build-to line runs parallel to, and is measured from, the front property line and is established to create an even (or more or less even) building façade line on a street.

CONCEPT PLAN: A narrative and graphic representation drawn to scale of the proposed development of a particular site which delineates the basic zoning and subdivision requirements including, but not limited to, the intended lot lines, general uses, ranges of square footages of the proposed uses and the general location of building and parking areas, points of access, primary internal circulation, contour lines, easements and required dedication areas for public facilities. The Concept Plan will also provide the graphic details required on a preliminary plat for those instances when it will be used as a substitute for a preliminary plat. The Concept plan shall not be used as a preliminary plat when the property is located in a Planned Unit Development (PUD) zone, in a Mixed Use

Zone District, or the Hillside Overlay (HS) zone.

CONTEXTUAL AREA: A mapped part of the City, as established in § 7.3.705, that is characterized by a general similarity of development age, street types and patterns, and block sizes. There are two (2) contextual areas in the City: (1) The "older/established" contextual area, and (2) the "newer/developing" contextual area.

CURB: A stone or concrete boundary usually marking the edge of a roadway or paved area.

CURBCUT: The length of an opening in the curb along a roadway that allows vehicular access to an abutting development site.

DRIVE-UP FACILITY (also know as "drive-in" or "drive-through" facility): An establishment that by design encourages or permits customers to receive services, obtain goods, or be entertained while remaining in their motor vehicles.

ENHANCED DRIVE AISLE: An element of a parking area in a MU zone district intended to provide access to parking areas, and connections for vehicles and pedestrians. It serves to define a block structure in parking areas.

FACADE: That portion of any exterior elevation on the building extending from grade to top of the parapet, wall or eaves and the entire width of the building elevation

FLOOR AREA RATIO (FAR): The gross floor area of all buildings on a lot divided by the lot area.

FOCAL POINT: A visual landmark. It commonly identifies the center of a development or area for public gathering, and contributes to establishing the character of the development. The Focal Point may be a statue, a plaza, a pavilion or some other structure or focused area.

HUMAN-SCALE: The relationship between the dimensions of the human body and the proportion of the spaces that people use. This is underscored by surface texture, activity patterns, colors, materials and details. The understanding of walking distances and spatial perceptions at a human scale determines the most positive placement of buildings, and the physical layout of the community. Buildings ranging in

height from two (2) to six (6) stories, trees and pedestrian-scaled signs and street lights, textured pedestrian paths and semi-private spaces all enhance this positive scale.

INFILL or INFILL DEVELOPMENT: Development of vacant parcels within a built-up area. Parks and open space are considered infill development, since they are permanent uses for vacant parcels.

INTERNAL STREET OR INTERNAL STREET SYSTEM: The system of public or private streets located internal to a development site, and which may connect at one or both ends to a perimeter public street. The internal street system is intended to provide vehicle, pedestrian, and bicycle access and circulation to all uses within a development site.

LARGE FORMAT BUILDING: A building in a MU zone district characterized by a footprint equal to or greater than one hundred sixty thousand (160,000) square feet, or by a continuous building frontage equal to or greater than four hundred (400) linear feet.

LIVE/WORK UNIT: A residential use type that combines a dwelling and a commercial space under single ownership in a structure. The residential portion of the unit shall contain at least four hundred (400) square feet of gross floor area. The commercial space shall allow activities compatible with residential use with respect to noise, smoke, vibration, smell, electrical interference, and fire hazard, and may include such uses as professional services and offices, and the creation, display and sale of art, craftwork, jewelry, fabrication of cloth goods and similar activities.

MIXED-USE DEVELOPMENT: Development that combines and integrates two or more principal land uses, such as commercial, office, civic, industrial, or residential uses with a strong pedestrian orientation. The mix of uses may be combined in a vertical MU building(s) or combined in separate buildings located on one property and/or under unified control.

MIXED USE ZONE DISTRICT. Any or all of the following zone districts: MU-NC, MU-CC, MU-R/EC.

MULLION: A vertical divider in a window.

PAD SITE: A "pad site" is a building or building site located in a retail center that is physically separate from the principal building located within the same

center. Pad sites are reserved for free-standing, single commercial uses, and accommodate buildings that are smaller than the principal building in the center. Typical pad site uses include buildings that contain restaurants, banks, and automotive services.

PEDESTRIAN PASSTHROUGH: A feature providing unrestricted public pedestrian access through a building or structure or between buildings or structures.

PERIMETER STREET OR PERIMETER STREET SYSTEM: The system of public streets that abut the perimeter of a development site, zone district, or activity center. Perimeter streets provide access to the internal street system, thus providing access and circulation to principal uses located in the interior of the development site, district, or activity center.

PHASING PLAN: A graphic and narrative document that displays the sequence and/or timing of intended development. Phasing is used to sequence the provision of public facilities. Phasing may be specified in a sequential order (1, 2, 3,) or by time period (2004, 2005).

REDEVELOPMENT: Development of a site within an older/established contextual subarea of the City, as established and mapped in § 7.3.705, where the site was formerly developed and cleared, or that requires the clearance of some or all of existing structures and improvements prior to new construction.

TRANSIT: A system of for the conveyance of persons from one place to another by means of regularly-scheduled transportation buses or trains, which is available to the public on a fee-per-ride basis.

TRANSITIONS: Generally, an array of tools and techniques designed to achieve compatibility between adjoining land uses that may differ by type and intensity, including but not limited to the following techniques:

TRANSITION USES: A land use, as defined and described in § 7.2.302(J), that may be appropriate to site between different land uses when the transition use is relatively more compatible with lesser-intensity adjoining uses.

SITE AND BUILDING TRANSITIONS: Designing and adapting the form and mass of a building to take into consideration neighboring buildings and land uses.

LANDSCAPE BUFFER & SCREENING TRANSITIONS: The use of landscaping, berms, fences, walls, or any combination of these, to buffer and screen a more intense land use from an adjacent, less intense land use.

VERTICAL MIXED-USE BUILDING: A multi-story building containing a vertical mix of two or more principal uses.

VESTING: The accrual of specific rights associated with development of real property as defined in accordance with Federal, State and Local law.

WALKWAY OR PEDESTRIAN WALKWAY: An on-site path for pedestrians or for pedestrians and bicyclists that is not part of the public right-of-way, and is not a public (dedicated) sidewalk or public (dedicated) trail. "Walkways" as defined herein include private sidewalks. Walkways typically combine to form a network providing internal pedestrian and bicyclist access and circulation on a development site, and typically connect to the public sidewalk system.

WRAPPED USE: A retail, service or other commercial-use type that occupies the ground floor of a structure, and extends on both sides of a corner of a structure.

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X. Index

Underlined page numbers indicate material from a table or chart.

Abbreviations used in this index:

- MU-CC = Mixed Use Commercial Centers
 MU-NC = Mixed Use Neighborhood Centers
 MU-R/EC = Mixed Use Regional/Employment Centers

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