# ARTICLE 9
# SPECIAL PURPOSE AND OVERLAY DISTRICTS

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*For the Watershed Overlay Districts – See Article 4. There are three water related overlay districts. The water shed around the Coddle Creek Reservoir (Lake Howell) and Coddle Creek is a WS II watershed, and is discussed at section 4.2. The watershed around Lake Concord is a WS IV watershed and can also be found at section 4.2. All of the rest of Concord is located in the watersheds controlled by the National Pollution Discharge Elimination System Phase II Stormwater Permit issued by the State of North Carolina. Sections 4.3 through 4.7 contain the standards for the balance of Concord outside of the Coddle Creek and Lake Concord watersheds.*

# Article 9 Special Purpose Districts

## 9.1 Planned Unit Development (PUD)

### 9.1.1 Purpose

The purpose of the Planned Unit Development district (PUD) is to provide for the orderly development of land with a mix of land uses and intensities. PUD zoning is intended to permit flexibility in the design, construction and processing of residential and non-residential developments. While the conventional zoning districts and the requirements of those districts set forth in the CDO are reasonable in most cases, there may be circumstances in which it is in the community's best interests to allow unique and/or creative designs and techniques that:

**A.** promote the most appropriate use of a parcel,

**B.** allow diversification of use,

**C.** facilitate the adequate and economical provision of streets, parks, open space, schools, storm drainage and sewer and water utilities,

**D.** preserve and utilize open space,

**E.** offer recreational opportunities close to residential uses,

**F.** enhance neighborhood appearance,

### 9.1.2 Processing Procedures

A PUD shall be processed as a conditional district zoning map amendment (rezoning) following the process outlined in § 3.3. Constituent parts of the PUD may require further approvals by the Planning and Zoning Commission and/or City Council, including but not limited to, site plan, subdivision or special use permit. Most specifically, a PUD which specifies only uses and densities and does not include specific site plan detail as specified in Section 5.4, shall require site plan approval by the Planning and Zoning Commission in accordance with Article 5.

### 9.1.3 Permitted Uses

**A.** The uses permitted in a PUD district shall be the permitted uses as set forth in the approved master plan. The master plan shall designate land use categories consistent with the zoning district classifications of this Ordinance. Within each land use category, proposed uses shall be subject only to the permitted uses in Tables 8.1.7 for each land use category.

### 9.1.4 Land Use Composition

**A.** The following percentages of land uses shall be considered when developing a PUD and will be used by the Administrator when evaluating proposals. Land uses already provided or that will be provided within 1,000 feet of the boundaries of the PUD may be considered by the Administrator providing there is direct, internal vehicular and pedestrian access from the proposed PUD to the neighboring commercial and other non-residential uses (if any). Figure 9.1-1 illustrates a well designed PUD

**1.** Moderate density residential (4-7 units per acre) = 20%

**2.** High density residential (8 or more units per acre) = 10%

**3.** Commercial uses as permitted in the B-1, C-1 or C-2 zones = 10%

> ***COMMENTARY:*** *If a proposed development is located on a smaller infill parcel, the administrator may allow variances to these ratios so long as the intent of the ordinance is not compromised.*

**B.** Open space shall be required in accordance with § 10.5.

### 9.1.5 Design Standards

**A.** The land uses within a PUD shall not be subject to any of the dimension and density provisions of Table 7.6.2. A, except that a perimeter buffer of 25 feet shall be maintained.

**B.** PUD designs shall be subject to the design criteria of Article 9.1.9.

### 9.1.6 Professional Design Team Required

An applicant for a PUD approval shall certify, in writing at the time of application, that a member of each of the following professions was used in the planning and design process for the proposed development:

**A.** Project planning and design by a licensed North Carolina architect, licensed North Carolina landscape architect planner certified by the American Institute of Certified Planners (AICP), or a registered land surveyor;

**B.** Landscaping design by a certified nurseryman or licensed North Carolina landscape architect; and,

**C.** Site engineering by a North Carolina Registered Engineer.

### 9.1.7 Modification of Approved Final Master Plan

Following approval of the zoning district, no modification of the land use category designations, design standards, uses, densities or any other condition of the master plan shall be permitted unless a new master plan is approved. However, the Administrator may approve the following modifications in writing without a new master plan:

**A.** A change in the location of not more than 10 percent of the dwelling units or floor area;

**B.** A change in the location of any part of open space acreage of not more than 10 percent of the gross acreage;

**C.** A change in the location of any part of proposed street alignment and lot configuration of not more than10 percent of the gross acreage;

**D.** An increase or decrease of any setback by not more than 5 feet for setbacks of less than 50 feet, or 10 percent for setbacks exceeding 50 feet.

### 9.1.8 Sign Standards

Sign standards shall be governed by Article (12) or by a Comprehensive Sign Package. The Comprehensive Sign Package shall be processed in accordance with Article 12. The Comprehensive Sign Package must show the proposed signage for the overall development and that it meets the intent of the Ordinance.

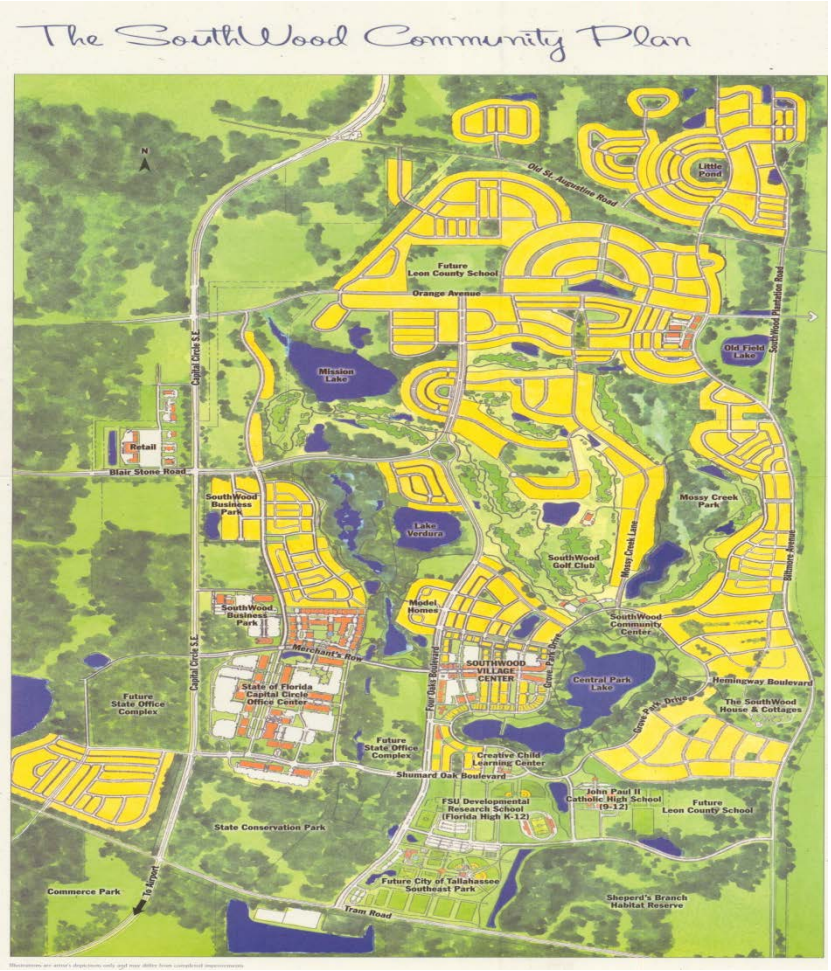



Figure 9.1-1
Example of a well-designed large PUD

### 9.1.9 Recommended Design Elements for a PUD Planned Unit Development

As indicated in § 9.1.1, PUD zoning is intended to permit flexibility in the design, construction and processing of residential, commercial and/or industrial developments of a quality that could not be achieved under conventional zoning concepts. However, certain minimal architectural standards shall apply and each project and will be reviewed considering the below items.

**A. Architectural elements**

1. Building height, rhythm, articulation, massing and bulk are compatible with the individual site attributes and are compatible with the surrounding neighborhoods.
2. Distinctive architectural details shall be in accordance with Articles 7.7 and (commercial design standards formally 12.5)
3. Significant architectural differences in the choice of elevations, roof lines, and exterior colors for each residential floor plan should be provided and meet the requirements of Article 9.25. .
4. Developer shall provide a pattern book in accordance with Article 9.25 E.
5. Garage fronts should be de-emphasized and not be the most prominent architectural feature of the house See Article 7.7 F

**B. Recreational elements**

1. At least 20 percent of the residential units shall be located within 660 feet of a pedestrian, equestrian and/or bicycle trail. Not including sidewalks or on-street bicycle lanes.
2. Recreation and open space facilities should be aligned with the community parks and open space network, as provided in any locally adopted land use plans or parks and recreation master plans.
3. Neighborhood scale recreation facilities and amenities should be provided which are functional, not retention/detention or basin-like in design. Retention basins used in conjunction with recreational facilities or amenities shall be designed in accordance with the Stormwater Management Standards of this Ordinance. Such areas should include turf or landscaping within all areas not permanently covered with standing water.
4. Gateway treatments may be incorporated at appropriate locations along an open space network.

**C. Transportation elements**

1. Park-and-ride lots may be incorporated with planned facilities.
2. Bicycle lanes should be included along at least 70 percent of the linear frontage of all planned collector streets.
3. Bicycle parking facilities should be provided for all uses except single family detached and duplex residences.
4. A customized entrance may be provided at the entry street intersecting a thoroughfare or collector which features a waterfall, sculpture, monument signage, special landscaping, specialty pavement, enhanced fence wall details, boulevard median or other similar treatment.

**D. Landscaping and Buffering elements**

Higher density or intensity developments abutting lower density or intensity areas shall include buffering that will substantially mitigate any negative impacts consistent with the Article 11.

**E. Other design considerations**

1. Homeowner or property owners associations are required to maintain all roadway/right-of-way landscaping, pedestrian-bicycle, and equestrian paths (arterial, collector and local as proposed) and stormwater infrastructure to the standards of this Ordinance.
2. Areas designated solely for industrial land uses shall be designed to create a campus-style environment.

## 9.2 Planned Residential Development (PRD)

### 9.2.1 Purpose

The purpose of the Planned Residential Development District (PRD) is to permit flexibility in the design, construction, and processing of residential developments to a quality that could not be achieved under conventional zoning approaches. Specifically, a PRD is designed to:

**A.** Advance the goals of the Comprehensive Plan;

**B.** Permit greater flexibility in terms of lots size and housing type;

**C.** To best utilize the physical features of the site;

**D.** Encourage the provision and preservation of accessible open space;

**E.** Protect significant environmental features such as (but not limited to) streams, wetlands, rare plant species, large trees, and wildlife habitat;

**F.** Encourage the assembly of multiple parcels of land into one large parcel for the purpose of applying a PRD. The adopted land use plan or any adopted small area plan shall be consulted in order to determine the most appropriate design and housing product mix.

### 9.2.2 General Requirements

PRD projects shall be evaluated with respect to the following:

**A.** The project is developed to an equal or higher standard than otherwise required by the strict application of district regulations that would otherwise govern; and

**B.** The project shows an innovative arrangement of buildings and open spaces that provide efficient, attractive, flexible, and environmentally sensitive design; and

**C.** The project produces a development that functions as a cohesive, unified project; and

**D.** The project does not substantially injure or damage the use, value, and enjoyment of surrounding property nor hinder or prevent the development

of surrounding property in accordance with adopted plans and policies of the City.

### 9.2.3 Minimum Standards

The Planned Development Residential (PRD) subdivision projects shall adhere to the following minimal standards.

**A. Minimum Size**

A PRD district shall be a minimum of three (3) acres in area. The Administrator may waive this minimum area requirement based on a finding that creative site planning through rezoning to a PRD district is necessary to address a physical development constraint, protect sensitive natural areas, or promote a community goal when more conventional development or subdivision would be difficult or undesirable given the constraints on development.

**B. Product Mix Described**

The PRD is designed to encourage a mixture of housing product. Developer's choosing to use the PRD option shall provide a technical data sheet that clearly indicates the number of units or lot sizes within each area of the development. For the purposes of this Section, a housing product shall include:

1. Any one from Figure 7.7-9 in Article 7
2. Single Family Detached structures with various lot sizes
3. Structures with more than 3 dwelling units
4. Congregate Care Home
5. Retirement Home

**C. Lot Size Reduction Bonus**

For single-family detached portions of the development, lot sizes may be reduced in exchange for open space at the following rate. One (1) square foot of lot for one (1) square foot of open space. Lots may not be reduced to less than 4,500 square feet and the frontage may not be less than 50 feet. All perimeter lots shall be at least 70 feet in width, or designed to be the same dimension as lots on adjacent parcels, whichever is less. If the perimeter lots are designed at 70 feet, they may be used to satisfy the 10% requirement outlined in 9.2.3 E., Lot Size Option below. In no case shall the allowable density of the underlying zoning be increased. All created lots shall conform to the standards outlined in Article 5.5 Lot Design Standards.

**D. Product Mix Options**

The premise behind the PRD is to provide a variety of housing sizes, types, styles, or products in a development. In order to achieve this the developer may choose one of the following options.

**E. Lot Size Option**

No single lot size shall comprise more than 60% of the lots in the development. This option <u>does not</u> allow an increase in the density of the underlying zoning district. Lot size variations must be in increments of 5

feet. No lot may be less than 50 feet in width and at least 10% of the development shall have lots 70 feet wide or greater.

Below is an example calculation:

Total lots proposed in the development: 200

70' wide lots required (10%): 20

60' wide lots proposed (60%): 120

50' wide lots proposed (30%): 60

**F. Dwelling Unit Type Option**

As an alternative to lot size, a developer may choose different housing types. This option does not allow an increase in the density of the underlying zoning district. Similar to the lot size option, no single type shall comprise more than 60% of the dwelling unit types in the development . The adopted Land Use Plan shall be consulted to determine the most appropriate housing type product and how it fits into the character of the area. All supplemental standards found in Articles 7 and 8 shall apply.

**G. Small Parcel Allowance**

For parcels that are between 3 and 5 acres in size one or two different housing types may be used, so long as the project is meeting the other design requirements of this Article 9.2

**9.2.4 Design Standards**

In additional to the design standards described in Article 8.28, the following design standards shall be applied to all single-family dwellings or buildings containing more than one dwelling unit.

**A. Garages**

Garage fronts shall be de-emphasized and not be the most prominent architectural feature of any dwelling in the development. This should be accomplished by providing side access garages, detached "in-line" garages, and/or L-shaped floor plans on not less than fifty percent (50%) of the lots. Garages should be recessed at least one car length in order to provide interest and relief from the street. The front elevation shall prominently feature an entrance for persons rather than automobiles with the garage area not to exceed forty percent (40%) of the front façade. See Article 7.7 for acceptable garage placement alternatives.

**B. Front Porches**

At least fifty percent (50%) of all single family, patio style, duplex, or townhome units in the development shall have a useable front porch measuring at least eight (8) feet in depth covering at least 30 percent of the building width.

**C. Recreation**

At least seventy percent (70%) of all residential units shall be located no further than 660 feet from a pedestrian (excluding sidewalks), equestrian or bicycle trail measured from the boundary of the lot. Recreation and open space facilities shall be aligned with the community parks and open space network, as provided in any locally adopted land use plans or parks and recreation master plans. For infill PUD's the Administrator may consider other eliments, such as sidewalks, in order to meet this requirement.

**D. Multi-Modal Requirements**

Bicycle lanes shall be included along at least seventy percent (70%) of the linear frontage of all planned collector streets.

**E. Development Entrances**

Customized entrances shall be provided at all streets intersecting a thoroughfare or collector. Such locations may include a waterfall, sculpture, monument signage, special landscaping, specialty pavement, enhanced fence or wall details, boulevard median or other similar treatment. The extent of such features shall match the scale of the proposed development (more significant features shall be required for larger developments).

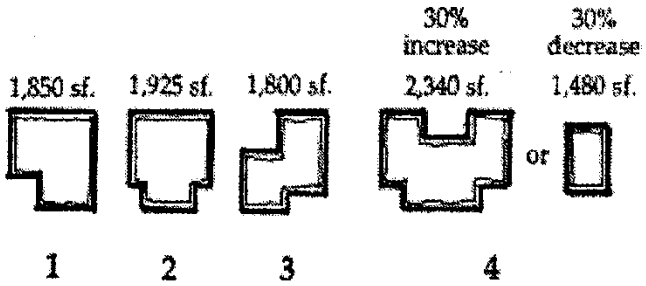
**F. Preservation of Tree Cover**

At least one third (1/3) of the tree canopy shall be protected for property covered with forest. Existing tree locations shall be clearly marked on the master plan.

### 9.2.5 Anti Monotony Standards

**A.** In additional to the design standards, the following standards shall apply to all single-family dwellings or buildings containing more than one dwelling unit to prevent monotony.

**B.** A variety of building sizes or scales shall be provided. No more than three buildings in a row shall have more than a 30 percent difference in scale between the largest and smallest building as measured by the building floor area (See Figure 8.28-1).




1,800 sf. (smallest lot) x 1.3 = 2,340 sf. (30% difference)
1,925 sf. (largest lot)/1.3 = 1,480 sf. (30% difference)

Figure 9.2.5-1
Size and Scale Variations

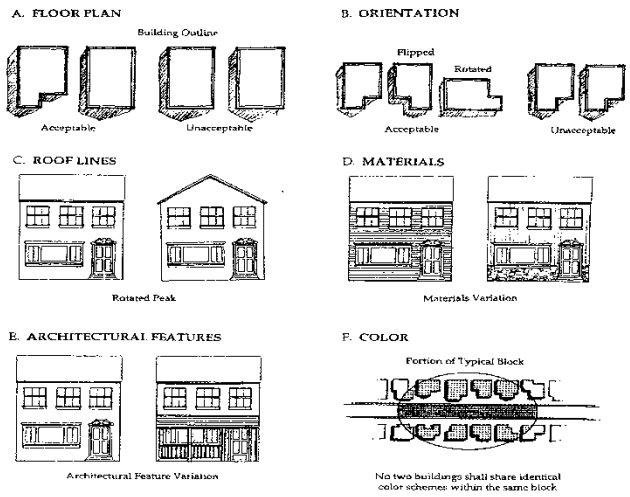



Figure 9.2.5-2

**C.** No two dwellings or buildings on a street face shall be identical in floor plan or color unless differing by at least two of the following (See Figure 8.28-2).

**1.** Rotated or reverse lot orientation

**2.** Different roof configuration

**3.** Different materials or exterior walls.

**4.** The addition of architectural features that alter the appearance of the building.

**D.** No single house directly across the street shall have the same floor plan. Identical color schemes shall require the addition of another differentiating feature (total of 3) from numbers 1 through 4 above to offset the similarity in color.

**E. Pattern Book**

The developer shall provide a pattern book (See Figure 9.2.5-3) indicating the style of homes to be built, materials, and their locations within the proposed district.

Figure 9.2.5-3
Example of a Pattern Book/Plan

### 9.2.6. Landscaping and Buffering Requirements

Class "C" Buffer yards are required around the development in accordance with Article 11 (current Article 9) with the following exceptions.

**A.** A Class "B" buffer may be used if the rear yard setback of the adjoining developed residential parcels is matched.

**B.** All perimeter buffer yards shall contain at least 60% evergreen plant material that reaches a mature height of no less than 6 feet. The Administrator may modify this requirement in situations where additional screening may be warranted.

**C.** Buffer yards shall be designated as undisturbed, conservation easements, or common open space on a subdivision plat and may be used in calculating the required common open space.

**D.** The use of existing vegetation to meet the requirements will be judged based on field observation by the Administrator.

**E.** Except in active recreation areas, existing healthy trees over twelve (12) inches in diameter in the common open space shall be preserved. The use of temporary fencing shall be employed to protect such trees during site development. The Manual shall be consulted for proper tree protection fencing practices.

### 9.2.7 Professional Design Team Required

Project planning and design shall be prepared by a licensed North Carolina architect, licensed North Carolina Landscape Architect, or Planner certified by the American Institute of Certified Planners (AICP), or a registered land surveyor; Landscaping design by a certified nurseryman or licensed North Carolina Landscape Architect; and, site engineering by a North Carolina Registered Engineer.

### 9.2.8 Approval Procedure

A PRD shall be processed as a Conditional District as set forth in Article 3.3. A set of Restrictive Covenants and Design Codes shall be established for each PRD by the Developer and shall be binding on all property owners after review and approval by the City in consultation with its attorneys.

### 9.2.9 Zoning Map Designation

Upon approval of a PRD, the zoning map shall denote the letters PRD followed by zoning case number.

# 9.3 MIXED USE DISTRICTS.

### 9.3.1. PURPOSE

The primary purpose of the Mixed Use Districts is to promote and protect public health safety, and general welfare. The goals of this ordinance include:

**A.** Promote the best use of the land and buildings in accordance with the Comprehensive Plan

**B.** Create a pedestrian scale urban environment with that support multiple modes of transportation

**C.** Integrate a mix of uses

**D.** Provide a variety of housing opportunities.

Mixed use zoning shall consider all future adopted small area plans.

### 9.3.2. MIXED USE DISTRICTS

**Four districts specifically tailored for mixed use development are established under this Section.**

**A.** **MX-NC** - Mixed Use-Neighborhood Center

**B.** **MX-CC1 -** Mixed Use-Commercial Center Small

**C.** **MX-CC2 –** Mixed Use-Commercial Center Large

**D.** **MX-IB -** Mixed Use Industrial/Business Center

**MX-NC – Mixed Use-Neighborhood Center District**

**Summary**

**A.** Location: Adjacent to collector/arterial,collector/local ,collector/collector street intersection (Figure 9.3-1) that encourages daily activity patterns for nearby residents

**B.** Size: 10 Acres or smaller

**C.** Building footprint: 50,000 SF max.; 25,000 SF for anchor tenant; 5,000 SF max. subsequent tenants.

**D.** Building Height: 50% shall be 2-story or greater

**E.** Uses: Residential, accessory, and small business uses as permitted by Table 4.6-1.

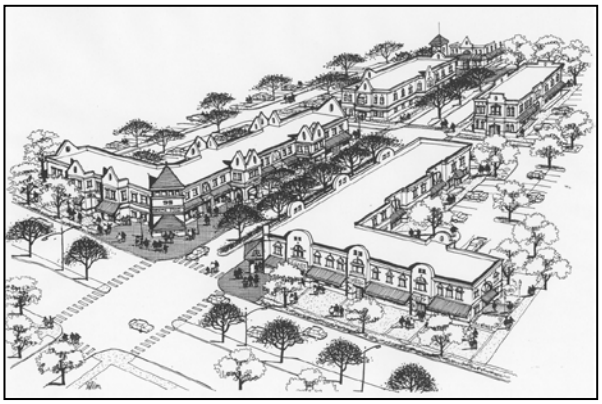


Figure 9.3-2
Neighborhood center examples

Mixed Use Neighborhood centers are small walkable communities with ample amenities

(Figure 9.3-2) that directly serve adjacent neighborhoods.

Auto-related uses or other uses that produce noxious fumes or excessive light and noise are prohibited within a neighborhood center (See Table 4.6-1). Single-family lots exceeding 10,000 SF are prohibited. Open Space is required and shall comply with § 6.5.

Figure 9.3-1
Neighborhood center corner as part of the Roberta Church Road/US-29 Small Area Plan

MX-CC1- Mixed Use-Commercial Center Small District

**Summary**

**A.** Location: Adjacent to the intersection of a collector/arterial or arterial/highway intersection.

**B.** Size: 10-30 acres

**C.** Building footprint: based on permitted uses

**D.** Max Tenant Size in Multiple Tenant Building: 8,500 SF

**E.** Building Height: 50% shall be 2-story or greater

**F.** Uses: Residential and commercial businesses as permitted by Table 8.6-1.

This district shall permit a wider range of commercial uses as compared to the MX-NC district and public facilities allowed by Table 4.6-1. The district shall have a residential component.

MX-CC1 districts shall balance automobile access from arterial and collector streets with transit orientation, pedestrian and bicycle access and circulation, and provide good vehicle and pedestrian connectivity to surrounding residential areas. These districts shall be located in areas that serve multiple neighborhoods with access from arterial and collector streets.

Depending upon their size, aging, single, limited-use local commercial centers and "greyfield" corridors are candidates for the MX-CC1 district.

Figure 9.3.-3
Commercial center corner as part of the Roberta Church Road/US-29 Small Area Plan

**MX-CC2- Mixed Use-Commercial Center Large District**

**Summary**

**A.** Location: Intersection of a collector/arterial or arterial/highway intersection.

**B.** Size: Greater than 30 acres

**C.** Building footprint: based on permitted uses.

**D.** Building Height: 50% shall be 2-story or greater

**E**. Uses: Residential and commercial businesses as permitted by Table 8.1.8.

This district shall permit a wider range of commercial uses as compared to the MX-CC1 district and public facilities allowed by Table 8.6-1. The district shall have a residential component.

Example uses in this district may 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, medical, institutional, and civic uses.

Depending upon their size aging, single, limited-use local commercial centers and "greyfield" corridors are candidates for the MX-CC2 district.

**MX- IB - Mixed Use-Industrial/Business Center District**

**MX-IB – Summary**

**A.** Location: Adjacent to two arterial streets or within a ¼ mile limited access freeways and highways.
**B**. Size: Greater than 30 Acres
**C**. Building footprint: based on permitted uses.
**D.** Uses: Residential, commercial, and industrial uses as permitted by Table 4.6-1

This district shall permit higher intensity uses than those described for MX-CC1 and MX-CC2 districts with a residential component. Examples uses may include corporate headquarters, class "A" office spaces, research and development, some warehousing and light industrial, and major educational facilities.

Figure 9.3-4
Regional employment center and supporting activity as part of the Roberta Church Road/US-29 Small Area Plan Concept

The MX-IB is the largest of the mixed use districts and is designed to accommodate the development of major employment, business, or light industrial facilities (Figures 9.3-4 and 9.1-5). This district is intended for large, higher intensity activity centers that combine the uses of commercial, business, and industrial centers with a residential component that and serve the city and region as a whole.

Figure 9.3-5
Corporate Office Example

### 9.3.3. PERMITTED, CONDITIONAL, AND ACCESSORY USES

Table 8.1.8 specifies allowed uses in MX zone districts. If a listed use is not marked in a particular zone district, it is prohibited in such zone unless otherwise allowed through a zoning map amendment (rezoning).

### 9.3.4. MIXED USE CONCEPT PLAN

Establishing a MX zone district begins with a concept plan. The concept plan shall describe and illustrate, in written and graphic formats, 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 concept plan shall indicate how the proposed uses will relate to the surrounding properties. The submittal of a concept statement in lieu of a concept plan is not permitted. The requirement for a concept plan is waived if a complete development plan, which includes a request for rezoning (a zoning map amendment), is submitted for the entire zone district.

### 9.3.5. CONCEPT PLAN AMENDMENTS

The following review criteria shall apply to MX zone concept plan amendments. A mixed use concept plan amendment shall be submitted when:

- **A.** There is a proposed change in the general location of an approved principal use, or
- **B.** There is a proposed change in the amount, type or density of residential uses, or
- **C.** There is a proposed change in pedestrian or vehicular circulation systems, right-of-ways, utility corridors or easements; or
- **D.** There is a proposed change of use that would change the location or amount of required parking; or
- **E.** There is a proposed change in uses that would change trip generation calculations greater than 10%; or
- **F.** There is a proposed change to an existing phasing plan.

A MX concept plan amendment request shall include maps of the entire MX 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.

### 9.3.6. EXPIRATION OF THE CONCEPT PLAN

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

- **A.** Six (6) years have occurred since approval of the concept plan and no development plan that implements the concept plan has been approved; or
- **B.** Six (6) years have occurred since approval of a development plan that implements the concept plan.

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

### 9.3.7. PHASING PLAN

An application to establish an MX zone district shall include a phasing plan that describes and illustrates, in written and graphic format, implementation of the concept plan and when development is anticipated over the life of the project. 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 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.

**A.** Assurances shall be in the form of a letter of credit, escrow payment, surety bond or recorded agreement by the mortgage holder, or if none, by the property owner guaranteeing the development of common amenities, in form and content acceptable to the Administrator after review by the City Attorney.

**B.** Assurances shall be submitted before a phasing plan for the mixed use zone district is approved.

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

### 9.3.8. SITE DEVELOPMENT PLAN

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

### 9.3.9. DEVELOPMENT AND REVIEW CRITERIA

A concept plan is required prior to any development within a MX zone district (see§9.19.4.) Other than approval of a concept plan, development within an MX zone district shall follow the procedures outlined in Article 4 and Article 5 of the Zoning Ordinance In addition, the following review criteria shall apply to mixed use zones.

**General**

**A.** The proposed MX concept plan is consistent with the Comprehensive Plan and all applicable elements of the Comprehensive Plan.

**B.** The proposed MX concept plan is consistent with any City-approved master or small area plan(s) that apply to the site.

**Mix of Uses**

**A.** The mix and location of principal uses is consistent with the intent and standards of the applicable mixed use zone district.

**B.** The residential use is well integrated with other uses, and the proposed housing types and densities assure activities that support the mix of uses in the development.

**C.** The open space serves as an amenity that supports walking and bicycling.

**D.** Build-to lines established along perimeter streets are located in such a way as to support a pedestrian-oriented streetscape.

**Access and Circulation Systems**

**A.** Vehicular and pedestrian ways provide logical and convenient connections between proposed uses, and to existing or proposed uses located adjacent to the proposed MX center, and establish a high level of connectivity.

**B.** The hierarchy of perimeter and internal streets should disperse development-generated vehicular traffic to a variety of access points, discourage through traffic in adjacent residential neighborhoods, and provide neighborhood access to onsite uses.

**C.** Existing or proposed transit routes should be incorporated into the MX center through the location of appropriate transit facilities, and related pedestrian improvements.

**Parking**

**A.** Automobile and bicycle parking areas are located in such a way as 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**

**A.** 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.

**B.** The capacity, age and condition of utility infrastructure shall be sufficient to meet the needs of the MX center at build-out, and if not, then proper relocation, replacement or other modifications shall be shown.

**C.** The general location and type of on-site amenities and landscaping provides desirable open space, creates an inviting image, enhances the pedestrian environment and offers spaces for people to gather, interact, and rest.

**D.** Landscaping that relates to individual streetscapes, internal parking lot landscaping and buffers and contributes ecologically and aesthetically

to the character of the MX center and supports a pedestrian-friendly environment.

**E.** Areas of unique or significant natural features are integrated into the MX development.

**F.** Signage and lighting systems unify the development and are compatible with and complement surrounding neighborhoods.

**G.** Signage themes designed in such a way so as to unify the MX center.

**H.** The proposed transitions shall ease the progression from more intense to less intense land uses.

**I.** Building masses mitigate visual impact for uses or activities that could be reasonably regarded as nuisances by neighbors.

### 9.3.10. INCENTIVES

Incentives are provided in the mixed use zoning districts to encourage and facilitate creative development. The following items summarize the incentives:

**1.** Greater flexibility allowed in the design as opposed to single use zoning requirements.

**2.** A greater number and variety of uses allowed in the mixed use districts versus in the other base zone districts.

**3.** Modifications of certain standards that reflect less demand in mixed use projects, such as off-street parking requirements.

**4.** An applicant may propose alternative compliance to the strict application of design standards, such that the alternative:

**A.** Achieves the intent of the subject design standard to the same or better degree than the subject standard;

**B.** Achieves the mixed use goals and policies in the comprehensive plan to the same or better degree than the subject standard; and

**C.** Results in equivalent or better benefits to the community than compliance with the subject design

**D.** Standard features which may be substituted or modified to achieve alternative compliance include but are not limited to:

**1.** Pedestrian walkways through parking lots; §9.3.14.15.

**2.** Pedestrian pass-through requirement, §9.3.14.13.
Maximum block length requirements, §9.3.14.2.

**3.** Alternative site layout and building orientation, §9.3.14.4.

**4.** For infill development and redevelopment sites bordered by developed land along at least 50% of the perimeter of the tract, consideration may be given for offsite features that are equivalent in function in order to meet the use requirements of the MX district.

**5.** The procedures and criteria for alternative compliance are presented in Article 9.3.11.

### 9.3.11. ALTERNATIVE COMPLIANCE, DESCRIPTION AND PROCEDURE

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, but rather permits a site-specific plan to

incorporate an alternative design equal to or better than the strict application of the design standards covered under this ordinance. If a concept plan or development plan is to include a request for approval of alternative compliance, a pre-submittal conference with the administrator is required. Applications for concept plans or development plans shall include sufficient explanation and justification, in both written and graphic forms, 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 equivalent to or better than compliance with the design standards under this ordinance.

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.

**9.3.12. ADDITIONAL STANDARDS FOR SPECIFIC LAND USES AND ACCESS COMPONENTS IN A VERTICAL MIXED USE BUILDING:**

1. *Pedestrian Access*: Separate pedestrian access and entrances shall be provided for the different uses within a vertically mixed use building.

2. *Accessory Dwelling Units*: Accessory dwelling units are allowed in any MX district as an accessory use to a principal single-family detached, duplex and townhouse dwelling. Accessory dwelling units within a MX district shall comply with the accessory dwelling unit standards in §5.2. (*update 5.2.1.3.in final CDO)*

3. *Accessory 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 MX-IB zone district, accessory retail sales must be conducted within the same building as the principal permitted use.

4. *Automobile Service and Repair:* This use shall meet the following conditions:
   - **A.** Body and fender repair service is a conditional use only in the MX-CC1, MX-CC2, and MX-IB zone districts;
   - **B.** 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.

5. *Live/Work Units*: Live-work units are subject to these standards as well as those covered in remaining parts of this ordinance:
   A. Multiple live-work units may occur in one (1) structure. Signage shall compy with Article 12 *(update Art. 12 to cover signs in the MX's in final CDO).*

6. *Private Clubs:* Private Clubs shall be governed by the supplemental use requirements in §5.18 with the following exceptions. On-premise private clubs 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 club establishment by a major street as defined in the City's Transportation Plan.

7. *Outdoor Storage*: In the MX-NC zone district, outdoor storage of any materials related to nonresidential uses is prohibited. In the MX-CC1, MX-CC2, and MX-IB zone districts, outdoor storage is allowed as an accessory use to a non-residential use if it is enclosed on <u>all</u> sides by an opaque wall or 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.

8. *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. No other animal boarding is allowed.

### 9.3.13. REQUIRED MIX OF USES

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

The concept and phasing plan in an MX 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 mixed use 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 mixed use building containing multifamily dwellings above the first floor shall be credited toward the meeting the residential use requirement.

The minimum requirement for use types is shown in Table 9.3-2.

**Table 9.3-2, Required Mix of Uses**

| Standard | Mixed Use Zone District | | | |
|---|---|---|---|---|
| | MX-NC | MX-CC1 | MX-CC2 | MX-IB |
| Minimum Number of Use Types [2] [3] | 2 | 3 | 3 | 3 |
| Residential Use required as Part of the 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 and a Vertical Mixed Use:*** Credit for residential units in a vertical mixed use building: As applicable, the total acreage of a site developed with a vertical mixed use building containing multi-family dwelling units above the first floor shall be credited as residential use in meeting the minimum 10% standard.

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

**[3]** ***Residential is a required use type in all mixed use districts.*** Other principal use types are listed in Table 4.6-1 as Permitted, Conditional, and Accessory Use.

### 9.3.14. DESIGN STANDARDS AND GUIDELINES

These following standards and guidelines for MX developments are addressed below.

#### A. Blocks, Buildings, and Street Networks

The overall layout of a successful mixed use development is one that generates 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.

3. Internal street patterns that defines block edges, create continuous pedestrian connections, and integrate pedestrian travel with other modes of transportation.

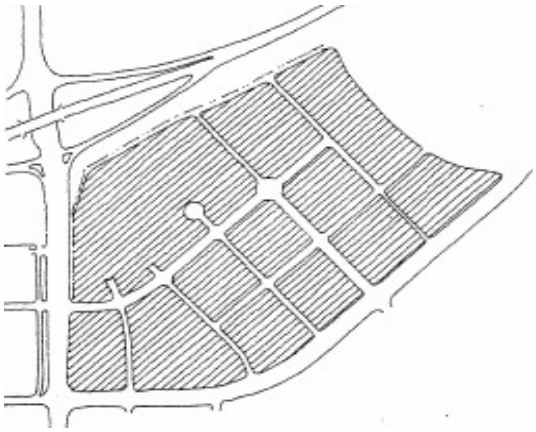


Figure 9.3-7 – Example of an acceptable block pattern

## B. Block Design

**Standards**

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 (Figure 9.3-7 and 11-8), 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 9.3.8).

4. The average block face across each development site and the entire mixed use zone district shall be a maximum of five hundred (500) feet.

5. For block faces that exceed four hundred (400) feet, a lighted mid-block pedestrian pass-through (Figure 9.3-8) shall be provided connecting opposite sides of block faces. Pass-through shall remain open at all times.

6. An applicant may submit alternative block standards, provided that such alternative achieves the intent of the above standards and procedures set forth in Alternative Compliance.

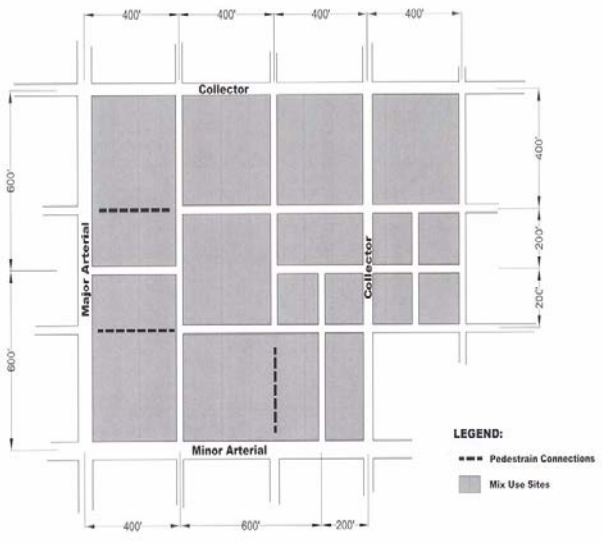



Figure 9.3-8 – Example of block standards

**Guidelines**

**1.** Enhanced drive aisles should be used to frame block frontages that consist entirely of surface parking areas. Enhanced drives isles are regarded as those with medians on either side containing sidewalks and street trees 40' on center. In general, the adjacent medians should be 12 feet in width.

**2.** In blocks that contain non-residential uses, mid-block through-alleys are encouraged to enable secondary vehicle access.

**3.** Pedestrian pass-throughs should incorporate artwork or display windows and should be designed so they cannot be closed or locked.

**4.** Pedestrian pass-throughs should be used to connect separate buildings or link customer parking in front of buildings.

Figure 9.3-10
Appropriate building entrances

**5.** 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. (Define Block in final CDO)

**6.** For multiple lot developments incorporating internal streets, important street vistas (such as along gateways and primary pedestrian streets) should terminate in a focal point, such as a building, architectural or landscape feature

**C. Building Entrance Orientation**

**Standard**

All buildings must have at least one building entrance oriented toward an abutting internal or perimeter street with on-street parking, or toward an on-site pedestrian walkway connected to a public sidewalk or toward a square or common open space.

Figure 9.3-9
Typical mixed use streetscape meeting the intent of this ordinance

**Guidelines**

**1.** The primary public entry to the building should be obvious and emphasized through the use of such architectural treatments as differing colors or materials, arches or arcades (Figure 9.3-9).

**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 be covered for weather protection for pedestrians. Overhangs should be at least 48 inches deep. Arcades, roofs, porches, alcoves, porticos, awnings, or any combination of these features are acceptable (Figure 9.3-10).

**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.

**D. Site Design for Multiple Building Developments**

**Standards**

**1.** All buildings shall be arranged and grouped so that their primary orientation complements adjacent buildings.

**2.** Adjacent buildings shall relate in similarity of scale, bulk, height, architectural style, and/or configuration to existing development, as applicable, and consistent with one of the following site layouts:

**A.** Buildings orient toward, frame and enclose a main pedestrian and/or vehicle access corridor within the development site, including an entry/spine street (Figure 9.3-11); or

**B.** Buildings orient toward, frame and enclose on at least three sides, parking areas, public spaces or other on-site amenities (Figure 9.3-12); or

**C.** Buildings orient toward and frame the corner of a perimeter or internal street intersection (Figure 9.3-13); or

**D.** Buildings orient to adjoining development, respecting adjoining exterior street alignment(s).

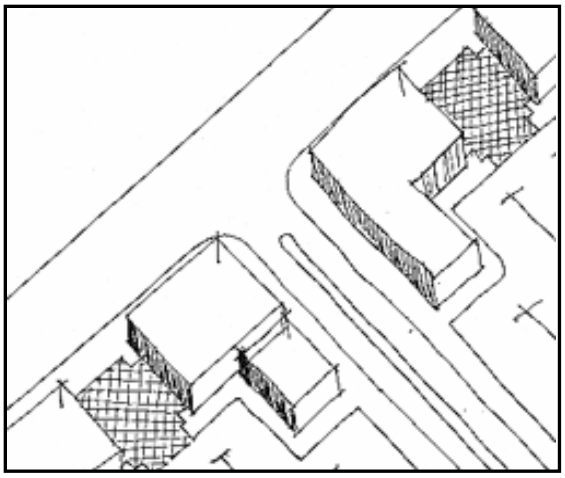


Figure 9.3-13
Buildings framing an entrance

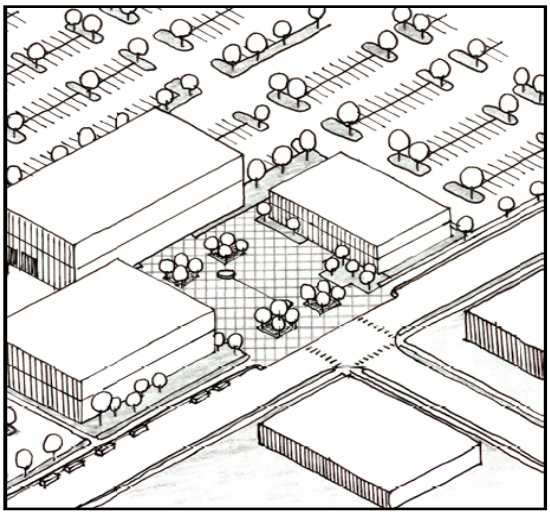


Figure 9.3-12
Buildings framing a space

**3.** For similarly used properties, the grade of adjacent lots shall match where the properties meet. If there is a significant grade difference, development shall create an attractive transition using creative grading and landscaping or a decorative retaining wall, incorporating vehicular and pedestrian cross-access.

**4.** Unscreened concrete retaining walls or rock covered slopes (i.e. rip-rap) are not permitted.

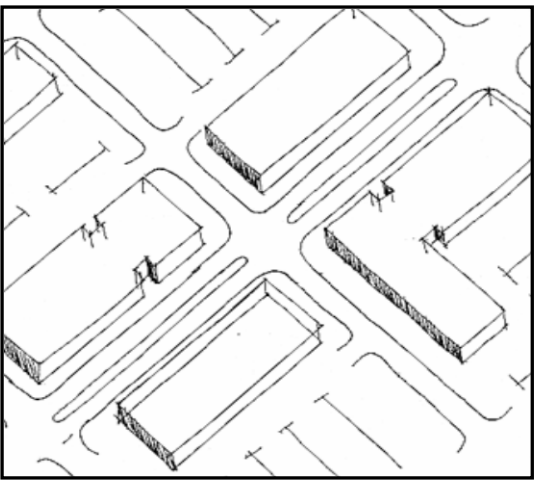


Figure 9.19-11
Buildings oriented towards a spine street

**5.** Applicants may submit an alternative site layout and building orientation pattern, provided such pattern achieves the intent of the above standards.

**6.** Strictly linear or “strip” commercial development are prohibited.

**7.** Minimum lot area: None

## E. Building and Streetscape Design

**Standards**

***1.*** *Building Design:* All building facades 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. For every thirty feet (30') of building façade length, the building shall incorporate modulated and articulated building wall planes through use of:

**A.** Projections, recesses and reveals expressing structural bays or other aspects of the façade, with a minimum change of plane of six inches (6"); and

**B.** Changes in color or graphical patterns, changes in texture, or changes in building material. When two or more materials are used on a façade, the heavier material (i.e. brick or stone) should be placed below the lighter material (i.e. siding) to give the sense of support and g rounding.

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

**D.** Roof pitches less than 3:12 require a parapet wall. A pitched roof shall be profiled by eaves a minimum of 6 inches from the building face or with a gutter.

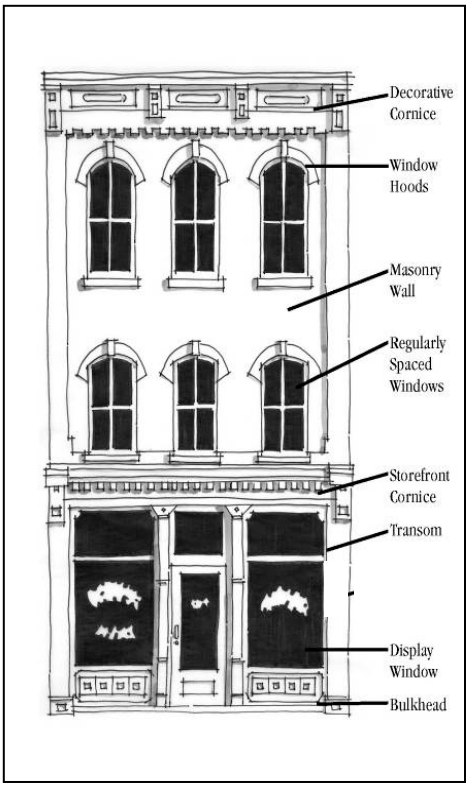



Figure 9.3-14
Example of building with appropriate articulation

**2.** *Fenestration*: Windows, doors, columns, eaves, parapets, and other building components shall be proportional to the overall scale of the building. Windows shall be vertically proportioned whenever possible (Figure 9.3.14). Reflective glass is prohibited.

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

4. Underground Utilities: Underground utilities (and associate pedestals, cabinets, junction boxes and transformers) shall be located in alleys, where possible. To reduce the visual impact of overhead wiring, utility services shall be located underground.

5. Signs: A comprehensive sign plan shall be submitted at the time of site plan submittal. Such a plan shall include the location, type, size, and height of all proposed signs in accordance with Article 12.

6. Mechanical and Utility Equipment: Mechanical and utility equipment shall be screened from view from nearby streets and properties in the same manner as trash containment areas. Ground mounted equipment shall be located in the rear or side yard and screened. Such equipment located on the roof of the building shall also be made invisible from nearby streets and properties through the use of setbacks from the edge of the roof or through the use of a screen exceeding the height of the equipment and using building materials and design which are compatible with those used for the exterior of the building. If the equipment is not visible off-site, then it need not be screened. The type of screening used shall be determined based on the proposed location of the equipment, existing site conditions, and the type and amount of existing and proposed vegetation on the site.

7. Screening Dumpsters: All dumpsters shall be screened in accordance with Article 11.

8. Second Floor Uses: At least 50% of the buildings in the mixed use district shall have least 2 stories.

**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.

**A.** Buildings should orient toward and frame, or enclose a main pedestrian and/or vehicle access corridor within the development (such as an Entry or Spine Street) (Figure 9.3-15);

**B.** Buildings should orient toward, frame and enclose on at least three sides, parking areas, public spaces, or other on-site amenities;

**C.** Buildings orient toward and frame the corner(s) where a perimeter street intersects with an Entry or Spine Street.

**D.** A "wrap" of smaller buildings around a large format buildings (buildings exceeding 80,000 square feet) is encouraged

Figure 9.3-15
Example of buildings oriented towards an entry street

**2.** *Build-to-Lines:* 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 (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 9.3-16).

Figure 9.3-17
Façade articulation

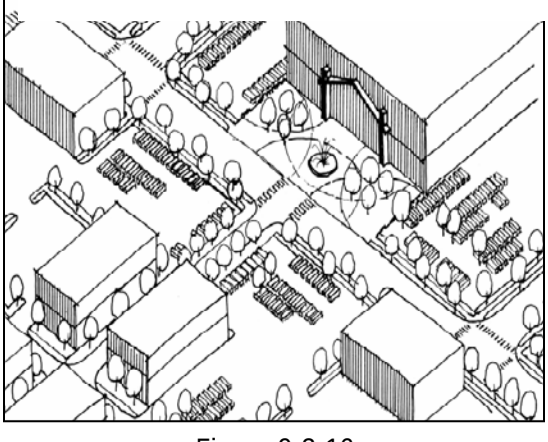


Figure 9.3-16
Building terminating at the end of main axis

**4.** *Buildings:*

**A.** 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. (Figure 9.3-17).

**B.** Texture and Relief: All buildings should create texture and relief in facades and should avoid large, flat, unbroken, wall planes (Figure 9.3-17). They should take advantage of the sun to highlight changes in plane, material, and detail, using light and shadow.

**C.** Human Scale Detailing: Facades of buildings that 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.

**D.** Weather protection elements (Figure 9.3-18) 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.

Figure 9.3-18
Example of a retail mixed use building

**E.** The horizontal length of the façade (Figure 9.3-19) of the ground floor of buildings should include awnings, transparent display windows, entry awnings, or other similar pedestrian-friendly features.

**F.** Each building housing a principal non residential 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:

**1.** Arbors;

**2.** Arcades

**3.** Contrasting building materials or textures;

**4.** Incorporation of street furniture at the ground floor;

**A.** Incorporation of outdoor eating or seating areas at the ground floor;

**B.** Variations in rooflines along a single block face; or transparent windows that allow views into and out of the building; black, mirrored, or other opaque surfaces should never be used.

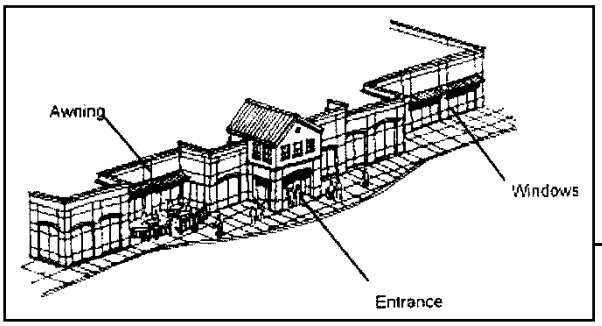



Figure 9.3-19
Large building with broken wall plane

The following standards and guidelines apply to residential structures in MX's.

**Standards**

All residential structures shall comply with Article 5.28 Residential

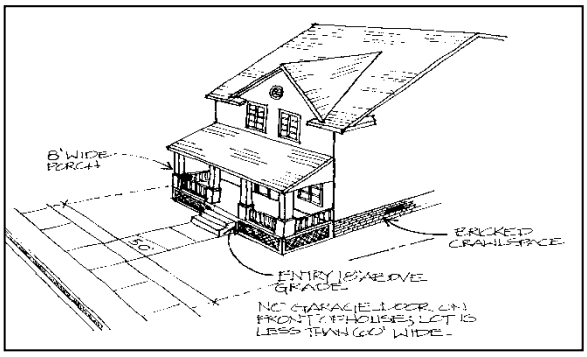



Figure 9.19-20
Example of a single family detached home meeting the requirements of this ordinance

Development Standards, and 11.2 Multi-Family Residential Design Standards. Additional standards are as follows:

***1.*** *Entries:* To provide privacy, all residential entrances within 15 of the sidewalk shall be raised from the finished grade (at the building line) a minimum of 1½ feet (Figure 9.3-20).

**2.** *Porches:* Useable porches and stoops shall form the predominate motif of the building design and be located on the front and/or side of the building. Useable front porches shall be at least 8 feet deep and twelve (12) feet in width (Figure 9.3-20 and 11-21).

Figure 9.3-21
Group of single family detached homes meeting the requirements of the ordinance.

**3.** *Garages*: Garage doors are not permitted on the front elevation of any detached house on a lot less than 60 feet wide. A single car driveshall be placed on the side of the house accessing a detached garage in the backyard of the property. Rear entry garages may be placed on any width lot. Otherwise, garage placement shall conform to Article 5.28. All garages with more than two bays shall be turned such that the bays are not visible from the street. The width of attached garages shall not exceed 40% of the total building façade.

**4.** *Crawlspace:* The crawlspace of buildings shall be enclosed (Figure 9.3-20). Brick, rock, stone, or stucco comprise the visible portion of the crawl space. Under no circumstances shall gray smooth face concrete block be visible. For the space beneath front porches, lattice material may be used.

**5.** *Townhome Detailed Design:* All building elevations visible from the street shall provide doors, porches, balconies, and/or windows (Figure 9.3-21/22). A minimum of 60% of front elevations, and a minimum of 30% of side and rear building elevations, as applicable, shall meet this standard. "Percent of elevation" is measured as the horizontal plane (lineal feet) containing doors, porches, balconies, terraces and/or windows. This standard applies to each full and partial building story.

**Table 9.3-3**
**Dimensional Standards**

| Item | Detached House, Duplex | Townhouse | Flat/Loft Building |
|---|---|---|---|
| **Lot Width**[1] (*Minimum*) | 30 ft | 16 ft | n/a |
| **Front Setback**[2] (*Minimum*) | 10 ft | 0 ft | 0 ft |
| **Front Setback**[2] (*Maximum*) | 20ft | 10 ft[5] | 8 ft[5] |

| | | | |
|---|---|---|---|
| **Front Yard Encroachment**[3] | Allowed | Allowed | Allowed |
| **Side Setback** (*Minimum*) | 5 feet | 6 ft between buildings | 6 ft between buildings |
| **Rear Setback** (*Minimum*) | 20 ft | 5 ft | 5 ft |
| **Rear Setback from Alley**[4] (*Minimum*) | 5 ft | 5 ft | 5 ft |

[1] For lots less than 60 feet wide and multi-family uses, alley/rear lane access to all off-street parking areas is required. For lots greater than 60 feet wide, access to off-street parking is permitted from the fronting street or rear lane/alley.
[2] Unless setbacks for specific streets are established by an approved area plan.
[3] Balconies, stoops, stairs, chimneys, open porches, bay windows, and raised doorways are permitted to encroach into the front setback so long as they do not interfere with traffic and pedestrian movement, utilities, or recorded easements that provide other services or access.
[4] For lots that provide access to off-street parking from a rear lane/alley
[5] Upper story balconies may encroach into the right-of-way (over sidewalk only) with written permission from the City Council.
[6] In new developments, the entire setback may be allocated to one side with a minimum of 6 feet of total building separation, providing the setback condition is consistent with the block

Figure 9.3-22
Townhomes that meet the requirements of the ordinance

**6.** *Setbacks:* Setbacks shall adhere to Table 9.3-3. All dimensions are subject to fire code restrictions and may vary. For lots fronting on 4 lane roads or expressways, additional setback depth may be required.

**7.** *Rooftop Equipment:* All rooftop equipment shall be screened from view.

**8.** *Mailboxes:* Community mailboxes shall provide a covered area for users and have 4 dedicated on-street or off-street parking spaces. Individual mailboxes for detached homes shall be architectural compatible with the house and utilize similar materials and colors.

**9.** *Driveway Width*: Single lane driveways serving detached homes shall be 12' in width.

**Guidelines:**

**1.** Driveways serving detached homes should be dual tread, leaving a grass strip in between.

**F. REQUIRED PUBLIC AMENITIES**

**Standards**

**1.** *Minimum Requirements*:

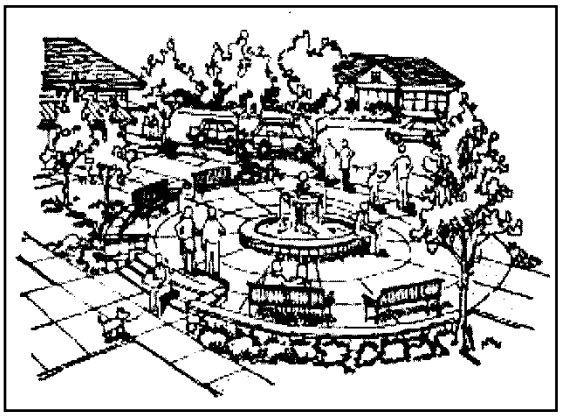


Figure 9.3-24
Pedestrian Plaza

All developments 5 acres or greater shall incorporate at least two (2) of the following on-site amenities or features:

**A.** Patio or plaza with seating areas. Such a space shall have a minimum depth and width of ten (10) feet, and a minimum total area of three hundred (300) square feet.

**B.** Asphalt is prohibited as a surface material; use of decorative pavers or textured, colored concrete is required.

**C.** Patios and plazas shall include pedestrian amenities intended to support these places as gathering areas.

**D.** 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 9.3-23 and 11-24).

**E.** Protected customer walkways, arcades, or easily identifiable building pass-throughs containing window displays and intended for general public access.

**F.** Water feature, such as a lake, pond, or fountain (Figure 9.3-24), provided the feature is easily accessed by pedestrians and includes or integrates seating areas for pedestrians.

**G.** Outdoor public art in an area that is visible from an adjacent public sidewalk or street, and easily accessed for viewing by pedestrians.

Figure 9.3-23
Pedestrian plaza

**2.** Any other, well-designed area and/or focal feature that the administrator 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.

**3.** When a building will be adjacent to a pedestrian plaza, patio, mini-park, square or green as provided under this part (Figure 9.3-25), the building wall facing such outdoor amenity shall contain at least one **(1)** of the following elements:

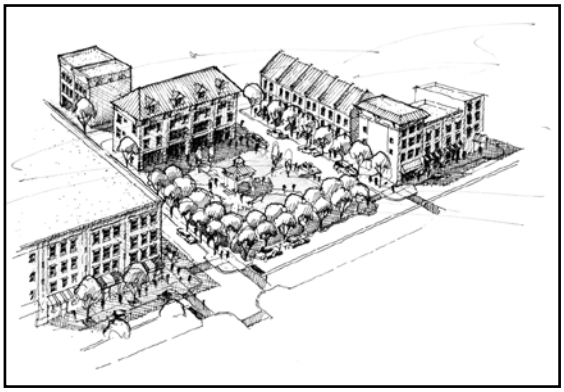


Figure 9.3-25
An "outdoor room" is created by surrounding an open plaza or

**A.** A building entry;
**B.** Windows facing onto the outdoor amenity;
**C.** Arcades along the edges of the outdoor amenity
**D.** Outdoor seating areas; or
**E.** A similar feature that the Administrator finds will bolster security and encourage pedestrian use of the outdoor amenity.

4. If the proposed development contains a existing or proposed transit stop,the development shall include a covered structure compatible with the surrounding architecture. A minimum of two 6-foot benches shall be incorporated into the transit stop.

**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, become a functional part of the development, 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 trial or other walkway.

**5.** 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.

**6.** A minimum of 25 linear feet of seating should be provided for every 1,000 square feet of open space.

**7.** Seating should be more than 12 inches and less than 30 inches in height and not less than 16 inches in depth. Seating more than 28 inches in depth and accessible from two sides should count double.

**8.** Moveable chairs are encouraged.

## G. MIXED USE VEHICLE ACCESS, CIRCULATION, AND CONNECTIVITY

**Standards**

**1.** *General Design:* Vehicle access, circulation, and connectivity for development in all MX zone districts shall be governed by the street standards for mixed use centers as set forth in the *City of Concord Technical Standards Manual*.

**2.** *Vehicle Access:* Primary vehicle access to MX's 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.** *Cross Access:* Within a MX, 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.

**5.** *Block Structure:* Development in an MX shall be based on a block structure consistent with § 9.8.19.2 in order to provide connectivity both within the mixed use development and with adjacent street systems.

**6.** *Street Connections:* Internal streets in MX's 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 MX 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 shall be designed and constructed according to the policies, standards, and guidelines governing street design in MX's outlined in the *City of Concord Technical Standards Manual.*

**9.** Circulation Drives: Along major thoroughfares, a one-way circulation drive may be permitted around the front of the building but may not encroach into the front setback or any required landscape area. If provided, this drive shall be designed to be the minimal width required (not to exceed 12 feet in width) and shall be constructed using alternative paving treatments such as pavers or stamped concrete.

## H. PEDESTRIAN AND BICYCLE ACCESS CIRCULATION

Developers shall provide a complete network of pedestrian paths that interconnect building entrances, parking, transit stops, public sidewalks and crosswalks, adjacent properties, adjoining off-street paths, and other key destinations on or adjacent to the site. Connection to adjoining parcels for bicycles shall also be provided. If no immediate benefit can be derived from pedestrian links between adjoining properties, a future at-grade link shall be provided for through a construction easement to the adjoining property.

**Standards**

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.

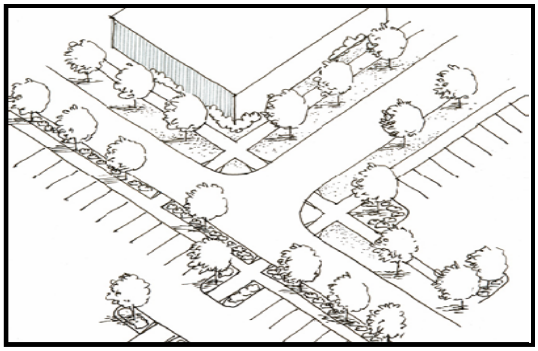


Figure 9.19-26
Pedestrian Connections

**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 9.3-26). 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 MX 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 further than two hundred (200) feet from the intersection. The Administrator may grant an exception where there are no existing or planned perimeter sidewalks.

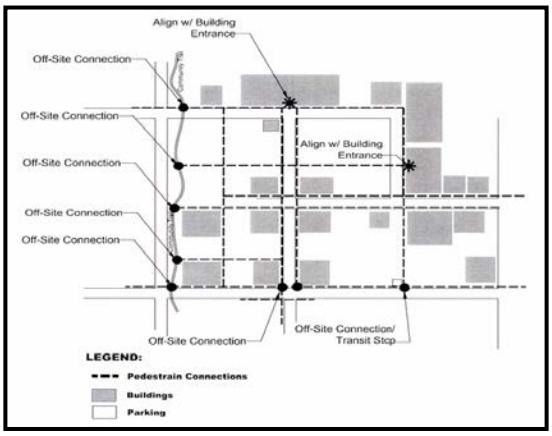



Figure 9.3-27
Pedestrian Circulation System

**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.

**5.** Bicycle lanes shall be included along collector streets where the projected motor vehicle volumes based on the traffic impact study are above 4500 vehicle trips per day and the street's posted speed limit is above 25 mph. Bicycle lanes should also be provided on any thoroughfares in accordance with bicycle components of the adopted transportation plan bicycle master plan. Connections to

adjoining bicycle paths or lanes shall be made. Bicycle lane widths shall conform to those outlined in the City of Concord Technical Standards Manual.

**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.

## I. INTERNAL PEDESTRIAN CIRCULATION AND CONNECTIONS

**Standards**

1. *Required Connections:* Each development shall provide an on-site system of pedestrian walkways and/or public sidewalks throughout the zone district (Figure 9.3-27) The on-site pedestrian circulation system shall provide the most efficient access route between the intended points of travel. Specifically, onsite pedestrian connections shall be provided to and between the following points:
   - **A.** The primary entrance or entrances to each building housing a principal use;
   - **B.** Existing or planned transit stops, stations, and park-n-ride locations;
   - **C.** Greenways or trail systems, where determined appropriate
   - **D.** either by the City or County Parks and Recreation Director, Livable Communities Blueprint of Cabarrus County, Transportation Plan or by the Administrator
   - **E.** On-site amenities

**Guideline**

It is important to create a pedestrian walkway system that provides direct linkages with primary destinations, 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.

## J. CONNECTIONS TO ON-SITE PARKING

**Standards**

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 9.3-28). A

minimum of one (1) connecting walkway or sidewalk shall be provided for every four hundred (400) lineal feet of vehicle parking area.

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 §11.8.5.5.

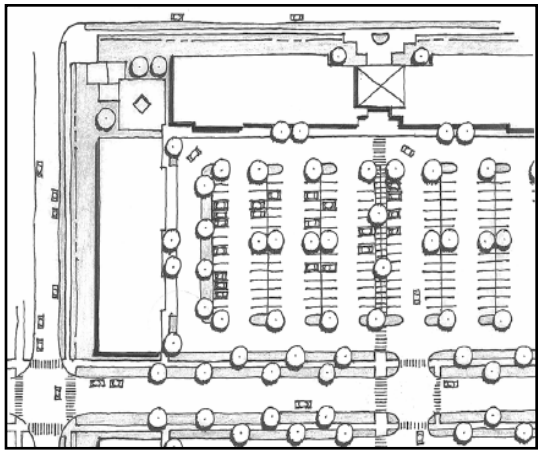


Figure 9.3-28
Pedestrian connections

**2.** Where an enhanced drive aisle forms the perimeter of a block, sidewalks shall be provided on both sides of the drive aisle (Figure 9.3-29).

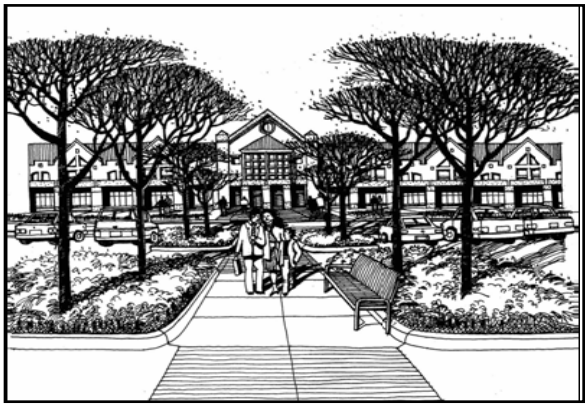


Figure 9.3-29
Primary destination link

**K. SIDEWALK/WALKWAY DESIGN**

**Standards**

Sidewalks and walkway shall be designed according to the standards shown in the *City of Concord Technical Standards Manual*.

**1.** All internal pedestrian walkways and sidewalks shall have 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 (10'). Pedestrian and bicycle pathways connecting to greenways or trail systems are subject to standards in the *Livable Communities Blueprint for Cabarrus County.*

**2.** Walkways shall be designed to create a safe and uninterrupted pedestrian way, and shall avoid frequent crossings by driveways or streets.

3. Perimeter or walkways sidewalks shall be a minimum of 5 feet in width.

4. Sidewalks or walkways adjacent to a parking area where cars will overhang shall be a minimum width of 7 feet.

5. Sidewalks or walkways along the full length of a building façade, where customer entrances are located, shall be no less than 8' feet in width.

6. At each point where a sidewalk or walkway crosses a street, the walkway shall be clearly marked using a change in paving material and color.

7. Sidewalks shall be provided on both sides of the street excluding alleys.

8. Internal sidewalks and walkways shall be well lit and constructed to provide an unobstructed line-of-sight to other pedestrians, motor vehicles, and other site users.

**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.

**L. PEDESTRIAN PASS-THROUGH DESIGN**

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 9.3-30) must stay open, regardless of whether businesses are open or closed. Alternative compliance may be allowed as described in §9.3.11 The administrator may waive the requirement for pedestrian pass-through in cases where there is limited viability for pedestrian access such as adjacency to an expressway or freeway.
2. Alleys and service areas shall not be considered to be pedestrian pass-through, although alleys may be designed with pedestrian walkways.

Figure 9.3-30
Pedestrian pass-through

**M. STREET CROSSINGS**

**Standards**

All pedestrian street crossings shall comply with the applicable policies, standards, and guidelines governing street crossings for MX shown in the Technical Standards Manual.

**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. Mid-block crossings, where necessary for good access, should include similar design characteristics.

## N. VEHICLE PARKING

Requirement of a Parking Master Plan: A parking master plan showing the proposed parking, for the overall development shall be approved at the time of rezoning.

All uses in an MX shall meet the motor vehicle parking requirements of Article 8, Off-street Parking and Private Driveway Standards. Due to the pedestrian nature of mixed use development, minimum parking requirements for retail, service, and institutional uses may be reduced by 25% for any use-related parking standards established in Article 8.

**Supplemental Parking Standards**

Minimum off-street parking amounts required for uses in MX zone districts are subject to the additional parking allowances and standards displayed in the following table by use type.

| Use Type | Minimum Required Off-Street Parking Spaces within a Mixed Use Zone District |
|---|---|
| Residential Use Types | Per Article 8 |
| Accessory Dwelling Unit | 1 space per dwelling unit |
| Live Work Structure<br>Residential Portion Only<br><br>Non Residential Portion | <br>1 space per dwelling unit<br><br>The lesser of:<br>a.) 1 space per 400 SF or;<br>b.) 1 space for each non- residential employee |
| Commercial Use Types | 1 space per 400 SF |
| Civic Use Types | 1 space per 300 SF |
| Industrial Use Types | 1 space per 1000 SF |
| Transportation Use Types | 1 space per 300 SF |

In additional to the standards outlined in Article 8, the following parking standards shall be applicable to all development within a MX zone district:

1. *On-Street Parking:* On-street parking is required where a particular land use will generate regular patrons for a business establishment. Occasional on-street parking (such as within a single family area) can be accommodated without additional pavement width or delineation. On-street parking shall count toward any minimum parking requirements.

2. *On-Street Parking — General:* The Administrator may allow on-street parking spaces located within four hundred (400) feet of the subject use 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 MX is created, 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.

**3.** *Credit Reductions:* The administrator may reduce the minimum off-street parking requirements by up to fifteen percent (15%) for MX developments if the development is one-quarter (¼) mile of a high-frequency transit stop or a public parking deck or lot.

**4.** Location of Off-Street Parking lots/decks shall be located to the side or behind buildings or in the interior of a block whenever possible. Parking areas in the side yards shall be located a minimum of 10 feet behind the frontage line of the building. No off-street parking shall be located within any front yard except for single-family residential uses or existing buildings not serviced by a rear alley. All off-street parking spaces for multi-family buildings shall be in the rear yard only and access to any garages shall be from the rear. Figure 9.3-31 illustrates and acceptable parking configuration.

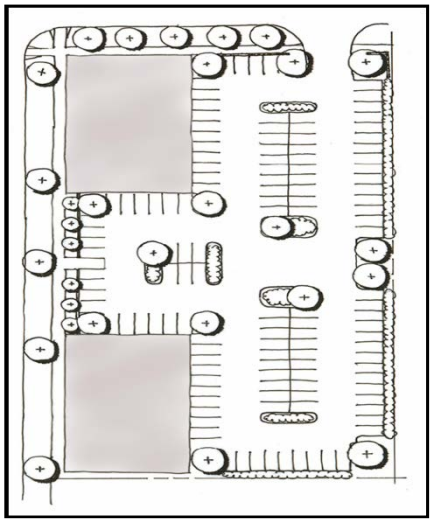


Figure 9.3-31
Acceptable off-street parking

Primary parking lots (over 24 spaces) and parking garages shall not:

**A.** Abut street intersections;
**B.** Be located adjacent to squares or parks; or,
**C.** Occupy lots which terminate a street vista

**5.** *Enhanced Pedestrian Access in Parking Lots:* All off-street surface parking areas shall be located within a designated block. For block faces that are composed entirely of surface parking lot areas, a street or enhanced drive aisle (Figure 9.3-32) that provides a detached sidewalk, defined pedestrian crossings, and street or parking lot trees along the block face shall border the block face.

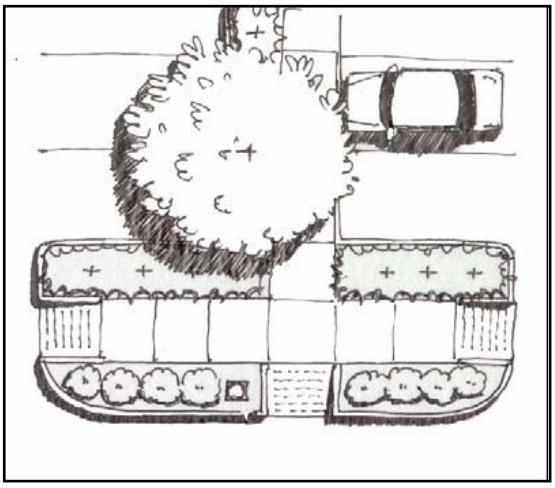


Figure 9.3-32
Enhanced pedestrian walkway

**6.** *Maximum Off-Street Parking Amount:* The maximum amount of off-street parking permitted for all uses in a MX shall be one (1) space per one hundred, seventy five (175) square feet of gross floor area.

**7.** *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.

**8.** *Shared Parking Standards:* The amount of off-street parking required for a mixed use development may be reduced by an amount

determined by the Administrator 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.

**9.** *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.

**10.** *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 Administrator. If any requirements for shared parking are violated, the affected property owners must provide a remedy satisfactory to the Administrator or provide the full amount of required parking for each use, in accord with the requirements of this part.

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

**<u>Supplemental Parking Guidelines</u>**

**1.** *Parking Encouraged:* The use of shared parking is strongly encouraged to reduce overall parking amounts for the following types of mixed use developments:

- **A.** 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
- **B.** Land uses with staggered peak parking demands when the individual uses are not under the control of a single owner/developer.

**2.** *Repair Bays:* For automobile service stations, repair garages, or other similar uses 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.

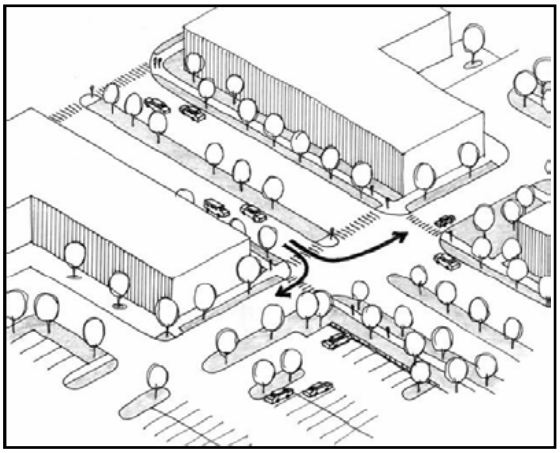


Figure 9.3-33
Dispersing incoming traffic.

**4.** *Dispersing of Incoming Traffic:* 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 9.3-33 and 11-34).

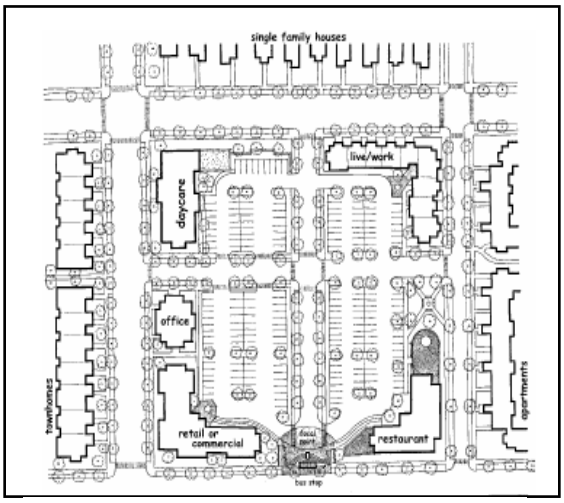



Figure 9.3-34
Example of an acceptable parking arrangement

**A.** The ground-level of a parking structure Should be wrapped by retail, office or some other active use along at least the primary façade.
**B.** All levels of a structured parking facility shall be designed and screened in such a way as to minimize visibility of parked cars.
**C.** No blank walls

## O. PARKING STRUCTURES AND DRIVES

Standards

**1.** Design: The design of a parking deck (Figure 9.3-35) shall comply or include the following:

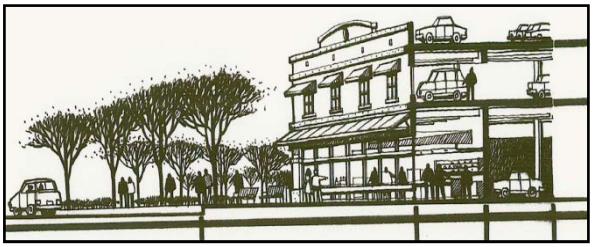


Figure 9.3-35
Example of a properly designed parking deck.

**2.** Vents and Utility Openings: In the event that any openings for ventilation, service, or emergency access are located at the first floor level in the building façade, then they shall be an integral part of the overall building design. Decorative elements shall be used to soften openings. In no case shall cabling be sufficient to meet this requirement.

**3.** Vehicle Entry: The entry locations for vehicles shall be oriented away from the primary street frontage. Entry/exit locations shall be located in areas that minimize pedestrian conflicts.

**4.** Ground Floor Treatment: Parking structures that integrates non-residential uses on the ground floor, shall build to a sufficient depth to allow such uses. The façade of the first floor shall incorporated the same design features as required for other building facades in MX's

**5.** Integration with Residential Uses: When a parking deck provides parking for residential uses or is integrated with residential uses shall either:

- **A.** Follow the design standards outlined for non-residential uses; or
- **B.** Use the ground floor of the structure for paring provided the ground level façade of the structure is at least 12 feet in height and contains a false

façade that integrates the same deign elements as required for non-residential structures.

**6.** High-Quality Materials: Along pedestrian-oriented streets, parking structure facades shall be treated with high quality materials and given vertical articulation and emphasis compatible to the principal structure. Materials shall compliment existing and planned buildings.

## P. Bicycle Parking

**1.** Bicycle parking is required based on the use of the building and the percentage of motor vehicle parking provided for each use, as indicated in the following table below. Bicycle parking is not required for single-family houses, townhouses, and apartments of less than 4 units per building. Where fewer than 2 spaces are required, at least two bicycle parking spaces or one rack shall be provided.

**2.** An "Inverted U" (Figure 9.19-36) or other bicycle parking rack that supports the bicycle at two points on the bicycle frame is the minimum standard for fulfillment of the bicycle parking standards. A single inverted U rack will count as two bicycle parking spaces. Long term bicycle parking, which protects the entire bicycle and its components from theft, vandalism, and weather (such as bike lockers, locked rooms) may be provided for use by employees and students and may count toward fulfillment of the bicycle parking requirements.

**3.** Bicycle racks shall be located no closer than three feet from any wall to provide adequate space for access and maneuvering. Bicycle parking for customers and visitors shall be placed along a major building approach line and clearly visible from the approach and no more than 50 feet from building entrances or no further than the closest motor vehicle parking space, whichever is less. Rack placement shall allow for visual monitoring by people within the building and/or people entering the building. Uses with several major, actively used entrances shall locate a portion of the bicycle parking at each entrance.

| Use Type | Bicycle Parking Spaces per 100 Auto Spaces |
|---|---|
| Multi-family Residential (>4 bldg. units)<br>Office/Business Services<br>Retail Trade (except Lodging)<br>Institutional/Civic (Non-Assembly Uses) | 5 |
| Lodging<br>Wholesale/Manufacturing/Industrial<br>Institutional/Civic (Assembly Uses Only) | 2 |
| Institutional/Civic (Schools) | 10 |

## Q. LANDSCAPING AND SCREENING

**Standards**

**1.** General Requirements: With the exception of the following additional standards, all
landscaping shall meet the requirements of Article 11.

**2.** Parking Area Screening: All parking areas adjacent to public rights-of-way shall be screened from view using one of the following methods.

**A.** A berm 3 feet in height with max. side slopes of 3:1 in combination with evergreen and deciduous trees and shrubs
**B.** A continuous hedge of evergreen shrubs that will reach a mature height of 3 feet and provide and opaque screen.
**C.** A decorative or ornamental fence 36 to 42" high in combination with shrubs and trees planted on the inside of the wall. The amount of plant material shall meet the requirements under Article 7.
**D.** Any combination of the aforementioned methods.

**3.** All linear shrubs beds shall be a minimum of 4 feet in width.

**4.** Street trees are required on all streets in the MX zone district.

**R. SITE LIGHTING**

**Standards**

**1.** *Shielding:* All exterior lighting shall be arranged to reflect away from any adjoining premises and any public right of way, and shall be shielded to contain all direct rays on the site. The light element (lamp or globe) of a fixture shall not extend below the cutoff shield. When a canopy (freestanding or attached) is illuminated, the lighting fixture shall not extend below the ceiling of the canopy. All exterior lighting within a MX, including signage lighting, shall meet the following additional standards:

**2 .** *Lighting Plan: Plan required:* Applicants shall submit a detailed lighting plan with final site plan applications. Plan shall indicate fixture types, pole design, location, and footcandle spread. A development-wide lighting plan shall address at a minimum the general location and general types of lighting to include the following:

**A.** Public and private street lighting, pedestrian lighting, parking lot lighting, residential area lighting, signage lighting, and lighting for service and delivery areas.

Figure 9.3-37
Example of appropriate light fixtures

**B.** Street lighting in residential and retail areas shall include pedestrian-scale, decorative streetlights no taller than 20 ft.

**3.** *Shielded Lights:* Fully shielded lighting fixtures shall be used in all parking areas, in service and delivery areas, (Figure 9.3-37) in residential areas, and for signage.

**4.** *Minimum Lighting Standard:* Ornamental

light fixtures may be used in streetscapes; however, public street lighting shall meet the standards of and be approved by Concord Transportation Department.

**Guidelines**

**1.** 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.

**2.** A mixed use development 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.

**3.** 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.

**4.** The use of a greater number of low fixtures is preferred over fewer taller fixtures.

**5.** 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 light

**S. STREET NETWORKS**

Mixed use centers are intended to incorporate all modes of transportation (motorized vehicles, bicycles, transit and pedestrians) both safely and efficiently by meeting the design standards for streets in *Mixed Use Developments* outlined in *City of Concord Technical Standards Manual.*

Since mixed use developments tend to create higher traffic impacts than single use development, 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 minimizes the impact on adjacent residential neighborhoods. A mixed use center 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. Additionally, an mixed use development will produce more internal automobile trips than a convention development. Except as expressly waived, the Traffic Engineering Department will adhere to standards set forth in the *City of Concord Technical Standards Manual.*

**Standards**

**1.** *Basic Design:* All streets shall be designed to meet City of Concord street found in

the *City of Concord Technical Standards Manual.*

2. *Driveways:* Driveways spacing shall comply with Concord Transporting Engineering requirements and the *City of Concord Technical Standards Manual.*

3. *Access:* A minimum of one access point per property ownership shall be permitted, which may be jointly shared with adjacent properties.

4. *Traffic Study:* A traffic impact study may be required if the City Traffic Engineer determines a need.

5. *Connectivity:* The Connectivity Ratio set forth in the adopted small area plan or concept plan shall apply to all new development. Streets shall interconnect within the development and with adjoining development. Street stubs shall be provided with development adjacent to open land to provide for future connections. Streets shall be planned with due regard to the designated corridors on the adopted Thoroughfare Plan.

6. On Street Parking: All on-street parking should be parallel. Angle parking is permitted in front of high traffic retail locations and where the posted speed is 20 mph or less.

7. Street Pattern: Streets shall be laid out in a pattern that conforms to an adopted small area plan or concept plan.

8. Curbs and Drainage: Standard curbing is required along all streets with on-street parking. Mountable curbing is permitted around center medians, roundabouts, and other features in order to facilitate the infrequent use by vehicles with larger turning radii. All drainage grates, if provided, must be safe for bicyclists (grating must be perpendicular or diagonal to the street centerline).

9. Cul-de-sacs: The use of cul-de-sacs in place of complete through street connections is strongly discouraged. However, when a cul-de-sac is determined to be the most practicable option, it shall not exceed (500) feet in length.

10. *Signalization:* Signalized access will only be allowed when agreed to by the Traffic Engineer or his designee 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 Concord. Signalized access will only be allowed for streets constructed to City standards.

11. *Blocks:* Mixed use developments will be based on a block structure in order to provide connectivity and to allow block length combinations that 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 MX within six hundred (600) feet of two intersecting principal arterials or higher classified roadways or as allowed by the City Traffic Engineer.

**12.** *Pedestrian Access:* Pedestrian and/or bicycle access into the site will be required within two hundred (200) feet of two intersecting principal arterials.

**13.** *Driveway Length:* Driveways that provide access to parking lots from perimeter streets into MX's shall be of sufficient length to allow vehicles to enter the center and not be obstructed from on-site conflicts in which traffic queues (Figure 9.19-38) onto the public or private street system. Typical stem lengths can be found in following table.

General Guide for Driveway Length

| Peak Hour Driveway Entering Volume | Unsignalized Minimum Driveway Length (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 |

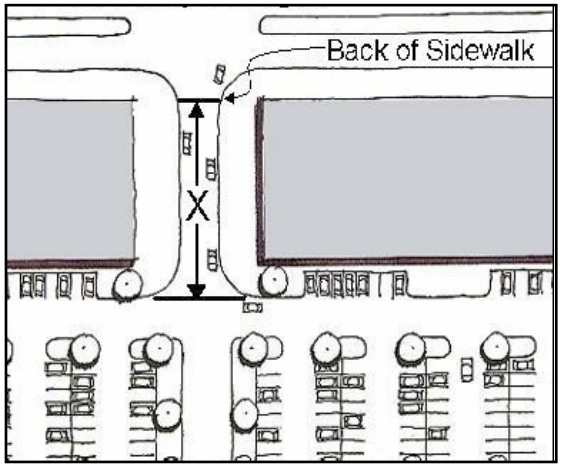



Figure 9.3-38
Illustration of an Entry Drive

**14.** *Main Entry:* Entry/spine streets are required for all Commercial Center (MX-CC1 and MX-CC2) and Regional/ Employment Center (MX-IB) mixed use developments. Entry/spine streets shall provide their main access from arterial streets into the center and are intended to clearly identify a driver has entered a "unique" area.

**15.** *Curb Extensions:* Curb extensions/Bump Outs shall be required on all public and private street intersections where on- street parking is allowed (Figure 9.19-39). Curb extensions will not be allowed to extend across an on-street bicycle lane or across a right-turn lane.

**16.** *Sight Distance:* 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. Intersection design shall meet MUTCD the Transportation Department guidelines and may include enhanced crosswalks with directional ramps, pavement treatment, median refuge islands and pedestrian indicators (Figures 11-40).

**17.** *Pedestrian Safety:* Pedestrian refuge areas or medians are required on all roadways classified as major collector and above. All pedestrian crossings (Figure 9.19-40) shall comply with the standards set forth in the Americans with Disabilities Act (ADA) and/or City of Concord Technical Standards Manual, whichever is the stricter rule. Pedestrian ramps shall be oriented directional only.

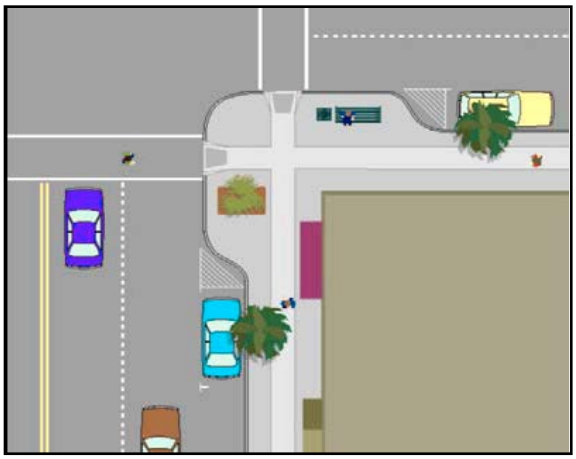


Figure 9.3-39
Curb Extensions

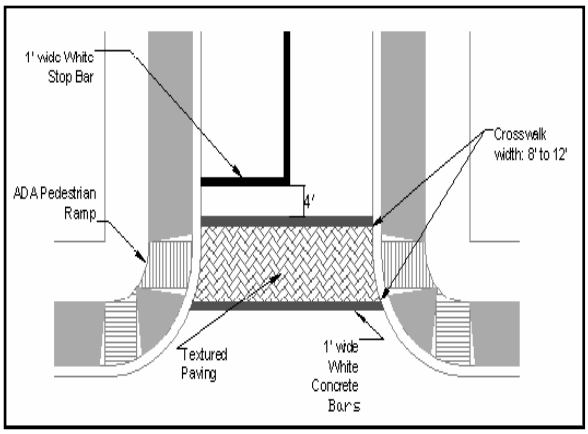



Figure 9.3-40
Acceptable Pedestrian

**Guidelines**

**1.**Traffic Calming: The use traffic calming devices such as raised intersections, landscaping bulb-outs, horizontal speed bumps, and traffic circles are encouraged as alternatives to conventional traffic control measures.

***2.*** Curb-Return Radii: Curb should be designed to reduce pedestrian crossing times along all streets requiring sidewalks. In general, curb radii should not exceed 20 feet.

***3.*** *Crosswalk Patterns:* 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

***5.*** *Storage Lanes:* Left- or right-turn storage lanes may be required along arterials or parkways and along entry/spine streets that provide access to a MX. The specific design of such lanes shall meet the criteria established by the Transportation Department.

## 9.4 Traditional Neighborhood Development (TND)

### 9.4.1 Purpose and Intent

**A.** The TND option is designed to permit the development of land in a manner consistent with traditional neighborhoods. Its provisions adapt the urban conventions which were normal in the United States from colonial times until the 1940's. The TND ordinance prescribes the following physical conventions:

**1.** The neighborhood is spatially consistent and limited in size.

**2.** Residences, shops, workplaces, civic buildings and parks are interwoven within the neighborhood, all in close proximity and connected by a system of sidewalks.

**3.** The hierarchy, design and detailing of streets, serves equitably the needs of pedestrians, bicycles and automobiles.

**4.** Carefully placed civic buildings and squares reinforce the identity of the neighborhood.

**5.** Spatially defined squares and parks are distributed and designed as specialized places for social activity and recreation.

**6.** Civic buildings provide places of assembly for social, cultural and religious activities, becoming symbols of community identity through their architectural clarity.

**7.** Private buildings form a disciplined edge, spatially delineating the public street space and the private block interior.

**8.** Architecture and landscape respond to the unique character of the region and traditional design principles with attention toward a classic sense of timelessness. Designs shall preserve the charm and unity of the neighborhood as a whole.

**9.** By providing a full range of housing types and workplaces, residents of all ages are blended together, forming the bonds of an authentic community.

**10.** The provision of comfortable public spaces such as streets and squares, residents may come to know each other to watch over their collective security.

**11.** By bringing within walking distance most of the activities of daily living, including dwelling, shopping and working, the elderly and the young gain independence of movement.

**12.** The compact layout of TND reduces the requirements for infrastructure, automobile use and traffic congestion. By organizing appropriate building densities, public transit becomes a viable alternative mode for local travel.

**B.** A set of restrictive covenants and design requirements shall be established for each TND by the developer and shall be binding on all properties and their property owners.

**C.** A property owners association, shall be formed to guide the growth, enforce the restrictive covenants, and preserve the unique characteristics of the TND.

**D.** This section contains procedures and standards for the processing of TND's both in new subdivisions and site plan applications on large, undelveleoped parcels (referred to as "Greenfield" sites), and on existing parcels surrounded by developed areas (referred to as "infill" sites)

### 9.4.2 TND District Described

**A.** The TND district is hereby established as a special purpose district and shall be processed as a Conditional District zoning under section § 3.3 and is eligible to be reviewed under the procedures for expedited rezoning pursuant to § 3.4.

**B.** Applications for a TND district shall be classified as either (a) TND GREENFIELD (b) TND INFILL.

### 9.4.3. Application Procedures

**A.** There are two procedures for approval of a TND:

**1.** First, the applicant may seek approval of a TND district as a Conditional District re-zoning pursuant to § 3.3, with site design and architectural guidelines, which supplement this Section.

**2.** Second, the applicant may seek approval of a TND subdivision in accordance with the guidelines set forth in this Section and Article 5. Such applications shall be labeled "TND Subdivision" and may be processed and approved in accordance with the subdivision plat approval procedures set forth in Article 5 without first seeking a rezoning to the TND District.

### 9.4.4 TND Greenfield

All applications for a TND Greenfield site shall comply with the following development parameters.

**A. Size and Location of Site.**

**1.** The minimum size of the site shall be forty acres and the maximum size shall not exceed 640 acres excluding areas devoted to peripheral parks, open space, and internal or peripheral greenways. Larger parcels shall be developed as multiple TNDs, each individually subject to all the provisions of this subsection. A TND may be located adjacent to, but shall not be bisected by, a thoroughfare.

**2. The Site shall be divided into the following subareas:**

**A.** A Town Center consisting of civic, retail, office, and multi-family uses. The size of the Town Center is based on the size of the entire site (see § 9.4.4.B., below).

**B.** A Neighborhood or series of neighborhoods consisting of blended multi-family and single-family uses, small-scale Retail and workshop uses, and public outdoor gathering places. It is the intent of this Ordinance that all areas within a Neighborhood are within a five-minute walking distance from edge to center (radius of 1320 feet).

**C.** Greenway areas which provide a greenway system for the community, open space for community residents, and natural areas for stormwater management. Greenways may border and/or traverse the TND site.

**B. Land Use**

**1.** Carefully blended land uses form the essence of Traditional Neighborhood Development. Uses within different land use categories, may abut at rear lot lines or at side lot lines (subject to § 9.4.4B, below). Open space, such as parks, squares, greens and plazas shall be considered similar land uses with all TND use categories.

**2.** The following land use categories may abut at side lot lines or face across a street, square, park or common space:

**A.** Single family may abut multi-family and small scale institutional;

**B.** Multi-family may abut single-family, office, civic, institutional or retail;

**C.** Retail may abut multi-family, office, civic or institutional;

**D.** Retail uses include shops, restaurants, entertainment and lodging .

**E.** Office may abut retail, institutional, civic, or multi-family.

**F.** Institutional may abut single family (if the institutional use is small in scale), multi-family, office, civic or retail.

**G.** Institutional uses include privately owned uses including religious buildings, non-profit institutions, private recreational facilities, clubhouses, museums, cultural societies, visual and performance arts buildings.

**H.** Civic may about institutional, multi-family, office or retail.

**I.** Civic uses include governmentally owned or funded uses that include public schools, libraries, post offices, municipal offices and meeting halls. EMS, fire and police stations are also civic uses, but due to noise considerations are more restricted in their location.

**3.** In order to provide a continuous pedestrian transition for residential neighborhoods and commercial areas, retail land use categories shall not be separated from Multi-family or Single-Family land use categories by berms or buffers. Adequate design measures shall be taken to minimize potential use conflicts. Limited fences and walls may be used when other design measures are ineffective.

**4.** Land use for corner lots which front on streets of dissimilar use shall be designated within the more intensive use category.

**5.** Prohibited Uses anywhere within a TND:

**A.** Automatic food and drink vending machines placed outside;

**B.** Any commercial use which encourages patrons to remain in the their automobile while receiving goods or services, except gasoline stations;

**C.** Chemical manufacturing, storage or distribution as a primary use;

**D.** Enameling, painting or plating, except artist's studios;

**E.** Outdoor advertising or billboard as a principal use;

**F.** Carting, moving or hauling terminal are yard, except delivery goods to businesses within a TND;

**G.** Correctional institutions, detention centers or halfway house;

**H.** Manufacture, storage, or disposal of hazardous waste materials;

**I.** Scrap yards;

**J.** Manufactured homes;

**K.** Sand, gravel, or other mineral extraction;

**L.** Kennels;

**M.** Any use or business controlled under the Adult Entertainment use category;

**N.** Any use which produces any of the adverse impacts defined as prohibited under the definition of light and heavy Industrial Uses.

**O.** Any use listed in the I-1 and I-2 Zoning Districts of Table 7.6-1 under Manufacturing and Industrial Uses or Transportation, Warehousing and Utilities Uses, as well as the following uses listed as special uses in the I-1 district:

- Correctional Institutions
- Heavy Truck, RV and Semi-Trailer Rental & Leasing
- Building Material Supply (with outdoor storage)
- Equipment Rental & Leasing (with outdoor storage)
- Lawn & Garden Supply (with outdoor storage)
- LP Gas & Heating Old Dealers
- Racetracks/Spectator Sports (includes racing test tracks)
- Chemical, PlastiSS & Allied Products

- Lumber & Construction Materials (with outdoor storage)
- Metal & Pipe Supply (with outdoor storage)

**C. Lots and Buildings**

**1.** All lots shall include frontage abutting a street, square or common open space.

**2.** The main entrance of all buildings (excluding outbuildings) shall open to a street, square or common open space of at least 20 feet.

**3.** All uses shall be conducted within completely enclosed buildings, unless otherwise specified herein.

**4.** Front or side yard porches of at least eight feet in depth and 12 feet in width shall be provided on not less than 70 percent of all dwelling units within the Single-family land use allocation.

**5.** The height of the eave or parapet wall of buildings facing across streets shall be sufficient to achieve an Enclosure Ratio for buildings, excluding buildings which face a Park, Square or common open space (of at least 20 feet in width), shall conform to the following ratios (the first number is the building height, the second number is the measurement from face of building to face of building.) The ground floor use shall designate the ratio:

**A.** Civic, Retail, Office Uses - 1:3.5

**B.** Multi-family, 1:4

**C.** Single Family Uses shall have their building front elevation set according to a single family "Build-To" line along the frontage established on the approved TND plan . Adjacent houses shall vary their setback slightly (no more than 2 feet) so as not to perfectly align with the adjacent dwelling.

**D. Retail and Office Uses**

**1.** Retail and Office use buildings within or fronting on the Town Center shall conform to the Master Plan approved at the time of rezoning. Retail and Office Uses shall be situated on the Master Plan such that the buildings create a walkable pedestrian friendly streetthrough building design and placement. Major changes to the building Master Plan shall be approved by the Planning and Zoning Commission.

**E. Street, Alleys, Sidewalks, Street Trees, Street Furnishings and Utilities**

**1.** The Connectivity Ratio set forth in the Article 10 shall apply to the TND. The street standards for TND roadways are based on proven techniques for traffic calming and acceptable levels of vehicular circulation. Streets shall be designed in accordance with the Traditional Neighborhood Development Guidelines from the N.C. Department of Transportation, Division of Highways (August, 2000 or most current edition).

**2.** There shall be a continuous network of alleys to the rear of building lots within the TND, except when topography or physical feature makes

impractical and as otherwise permitted herein. Dead end alleys are strongly discouraged, but in no circumstances shall an alley have a dead end length of over 100 feet.

**3.** An on-site transit stop shall be provided where the proposed TND is within the service area of a City bus system, a Public Transportation Authority or a Regional Public Transportation Authority.

**4.** Sidewalks in residential areas shall be located on both sides of the street and shall be separated from the roadway by a planting strip and/or designated parallel parking. If a planting strip is provided, it shall be a minimum of 6 feet in width. Sidewalks located in the Retail/Office/Town Center area may extend from the back of curb to the buildings and/or plaza areas. Where this option is used by the developer, planting beds for trees and/or designated areas of landscaping shall be incorporated into sidewalk areas to create a "downtown streetscape". All proposed sidewalks shall be included on the Master Plan at the time of rezoning.

**5.** Canopy Street trees shall be planted on both sides of the street and shall be spaced according to species and to the standards established in Article 11, Landscaping and Buffering. No understory trees shall be used as street trees. A consistent variety and species of street tree shall be maintained by street, but adjacent streets shall diversify species as a precaution against blight. Street trees planted within the TND commercial district or within an area subject to heavy foot traffic, design measures (such as tree grates) shall be installed as a measure to protect the tree root system.

**6.** Street furnishings shall include but not limited to:

**A.** Commercial Areas: Pedestrian scale decorative street lights, decorative street signs, benches, trash receptacles, water fountain and other appropriate decorative pedestrian oriented features.

**B.** Residential Areas: Pedestrian scale decorative street lights, decorative street signs.

**7.** To the extent possible, underground utilities (and associated pedestals, cabinets, junction boxes and transformers) including electric, cable TV, telephone and natural gas service shall be located within the alley ROW and not along the streetscape frontage. It is assumed that domestic water service and sanitary sewer will serve from the streetscape frontage, but will be located in such a way to cause the least impact on the planting strip and required street trees. Public Utility Departments, Companies and their contractors shall be required to cooperate with this effort.

## F. Parking

**1.** A Parking Master Plan showing the proposed parking for the overall development shall be approved at the time of rezoning.

**2.** On street parking is required where a particular land use will generate regular guest or customer parking use. Occasional on-street parking

(such as within a single family area) can be accommodated without additional pavement width or delineation.

**3.** On-street parking shall be provided on streets abutting squares, small parks or other urban open spaces.

**4.** For interior commercial parcels, no less than 75 percent of the parking space shall be located to the rear of the building being served. Commercial parcels fronting on non-pedestrian oriented major arterials may locate primary parking lots along this frontage. Where primary parking abuts streets within the interior of the TND, screen walls shall be erected on the frontage line where primary parking lots are located.

**5.** Primary parking lots (over 24 spaces) and parking garages shall not:

**A.** abut street intersections;

**B.** be located adjacent to squares or parks; or

**C.** occupy lots which terminate a street vista.

**6.** Adjacent parking lots shall have vehicular connections from an alley.

**7.** Parking for retail and service uses shall not require on-site parking provided, however, that: (1) the required parking, in accordance with § 10.3, is available within a six-hundred-foot radius of the activity; (2) the total floor space for the individual uses does not exceed 2,500 square feet of gross floor area; and (3) such uses are restricted to Retail and multi-family areas. Due to the pedestrian nature of the TND, parking requirements for retail, service and institutional uses may be reduced by 25 percent of any use related parking standards established in § 10.3. On-street parking shall count toward any minimum parking requirements.

**8.** Loading areas shall adjoin alleys or parking areas to the rear of the Principal Building unless otherwise approved on the TND plan.

**9.** Shared parking may be used for multiple sites if a written agreement between the owners and lessees is executed for a minimum of 10 years, approved by the Administrator, and recorded at the Cabarrus County Registry with a copy maintained for the project file. A recorded subdivision final plat showing the shared parking may be submitted in lieu of the written agreement.

**G. Landscaping and Buffering**

**1.** A Landscape Master Plan shall be approved at the time of rezoning for the overall development. The Master Plan must show that the proposed landscape meets the intent of the ordinance and includes the different types of planting yards, as defined in Article 11, for each project area or parcel, whichever is applicable. In instances where the buffer width and intensity defined in Article 11 may not be appropriate, the Administrator may make reductions or adjustments as

deemed necessary. However, the adjustment or reduction may not be such that it includes the deletion of any of the planting yards.

**2.** The purpose of this Section is to ensure that trees are used as a design element to provide visual identity to the TND and to reinforce the public function of streets. Street trees shall be planted along all streets at a average center to center spacing based on the mature spread of the particular street tree.

**H. Town Center**

**1.** Land Allocation and Location. The Town Center shall have a minimum area of square foot of Town Center for each 500 square feet per of gross site area of the entire TND site (excluding Greenway areas). Commercial areas shall only be permitted where designated on the Site Plan. A town center shall be located only on a street with adequate capacity to serve it.

> ***Example:*** *A proposed TND has a gross site area of 300 acres, with an additional 8 acres of greenway running through the site, for a total of 38 acres?. The minimum square footage for the Town Center is 26,136 square feet (13,068,000 square feet gross site area divided by 500 square feet = square feet in Town Center).*

**2.** Retail and Office. The character of the Town Center is primarily aimed at small-scale retail, service and office uses. However, larger anchor stores or uses may be included as part of an overall commercial package. Such proposals will be evaluated on a case-by case basis.

**I. Open Space**

**1.** The proposed development shall include at least the amount of open space as prescribed in Table 10.5.13. Open Space shall comply with the design requirements of § 10

**J. TND Site Plan**

**1.** In addition to the preliminary plat and/or conditional district re-zoning requirements specified in Articles 5 and 6, the TND Site plan shall also include all aspects of the spatial relationships proposed for the Traditional Neighborhood Development including:

**A.** layout and dimensions of lots, setbacks (build-to-lines) roadways, alleys, underground utilities, open spaces and all information required to define the relationships within the streetscape;

**B.** designated land uses and associated building heights with proposed streetscape enclosure ratios;

**C.** proposed streetscape furnishings including the pedestrian lighting plan;

**D.** proposed street tree landscape plan;

**E.** outline covenants and design codes;

**K. Sign Standards**

Sign standards shall be governed by Article 12 or by a Comprehensive Sign Package. The Comprehensive Sign Package shall be processed in accordance with § 6.2. The Comprehensive Sign Package must show the proposed signage for the overall development and that the proposed signage meets the intent of the Ordinance.

### 9.4.5 TND Infill

All applications for a TND Infill site shall comply with the following development parameters:

**A. Land Allocation and Density**

A single land use category, as set forth in Table 9.2-1, may be approved as a TND Infill site. The requested densities shall conform to § Table 7.6.2.A.

**B. Land Use**

**1.** Land use category may be determined from Table 9.4-1, below. Adjacent sites may count towards the land use allocation providing it falls into one the categories listed in Table 9.4-1.

| (A) TND Land Use Category | (B) Zoning Category |
|---|---|
| Civic | C-1, C-2 |
| Retail | B-1, C-1 |
| Office | O&I ? C-2 |

Table 9.4-1

**2.** Carefully blended land uses form the essence of Traditional Neighborhood Development. Uses within different land use categories, may abut at rear lot lines or at side lot lines (subject to § 9.4.5.C.3. below). Open space, such as parks, squares, greens and plazas shall be considered similar land uses with all TND use categories.

**3.** The following land use categories may abut at side lot lines or face across a street, square, park or common space:

**A.** Single family may abut multi-family, office, and small scale institutional;

**B.** Multi-family may abut single-family, office, civic, institutional or retail;

**C.** Retail may abut multi-family, office, civic or institutional. (Retail uses include shops, restaurants, entertainment and lodging.);

**D.** Office may abut retail, institutional, civic, or multi-family.

**E.** Institutional may abut single family (if the institutional use is small in scale), multi-family, office, civic or retail. (Institutional uses include privately owned uses including religious buildings, non-profit institutions, private recreational facilities, clubhouses, museums, cultural societies, visual and performance arts buildings.);

**F.** Civic use may abut institutional, multi-family, office or retail. (Civic uses include governmentally owned or funded uses that include public schools, libraries, post offices, municipal offices and meeting halls. EMS, fire and police stations are also civic uses, but due to noise considerations are restricted to locations where their potential nuscience impacts on other land uses are less.

**4.** In order to provide a continuous pedestrian transition for residential neighborhoods and commercial areas, retail land use categories shall not be separated from Multi-family or Single-Family land use categories by berms or buffers. Adequate design measures shall be taken to minimize potential use conflicts. Limited fences and walls may be used when other design measures are ineffective.

**5.** Land use for corner lots which front on streets of dissimilar use shall be designated within the more intensive use category.

**A.** Prohibited Uses. (See 9.4.4.B.5)

**C. Retail and Office Uses**

**1.** Due to the limited scale of the infill TND, Retail and Office uses should be located at the edges of the TND development, but spatially well connected to the TND residential areas.

**2.** Retail and Office use buildings within the TND shall conform to the standards outlined in § 9.3

**D. Open Space**

The proposed development shall include at least the amount of open space as prescribed in Table 10.5.13. Open Space shall comply with the design requirements of Column (F) of Table 9.2.5-2.

**Table 9.4.5-2 Design Standards for a TND**

| (A) *OPEN SPACE USES* | (B) Minimum Land Allocation | (C) Maximum Land Allocation | (D) Minimum Floor Area Ratio (FAR) | (E) Maximum FAR | (F) Design Standards |
|---|---|---|---|---|---|
| ***Open Space*** | Greater of 5% Gross Land Area (GLA) or 5 acres | 40% GLA | n/a | n/a | Open space should be bounded by streets on at least 25% of their perimeter. |

| (A) *OPEN SPACE USES* | (B) Minimum Land Allocation | (C) Maximum Land Allocation | (D) Minimum Floor Area Ratio (FAR) | (E) Maximum FAR | (F) Design Standards |
|---|---|---|---|---|---|
| ***Square*** | 15,000 sq. ft. | 70,000 sq. ft. | n/a | n/a | Square shall count toward required open space<br><br>A minimum ½ acre square should front or be located within the Town Center.<br><br>Squares should adjoin streets on at least two sides.<br><br>Squares should be distributed throughout the TND so as all dwelling units are located within 1,000 feet (walking distance) of a square. |
| ***Greenbelts*** | May be provided at the perimeter of a TND if adjacent land is incompatible | n/a | n/a | n/a | Greenbelts differ from other types of open space in that existing natural vegetation and wildlife is undisturbed except for bikeways and walking trails.<br><br>Greenbelts should average at least 100 feet in width and not less than 25 feet at any point. |

**E.** TND Master plans shall be processed as a conditional district and processed in accordance with § 3.3.

**1.** In addition to the preliminary plat and special use requirements specified in Articles 5 and 6, the TND Site plan shall also include all aspects of the spatial relationships proposed for the Traditional Neighborhood Development including:

**A.** layout and dimensions of lots, setbacks (build-to-lines) roadways, alleys, underground utilities, open spaces and all information required to define the relationships within the streetscape;

**B.** designated land uses and associated building heights with proposed streetscape enclosure ratios;

**C.** proposed streetscape furnishings including the pedestrian lighting plan;

**D.** proposed street tree landscape plan;

**E.** an outline of covenants and design codes.

**F. Sign Standards**

Sign standards shall be governed by Article 12 (New Article 13) or by a Comprehensive Sign Package. The Comprehensive Sign Package shall be processed in accordance with § 6.2. The Comprehensive Sign Package must show the proposed signage for the overall development and that the proposed signage meets the intent of the Ordinance.

## 9.6 Manufactured Home Park (MHP) District

### 9.6.1 Purpose

The purpose of this Section is to provide sufficient land area for the provision of manufactured housing in for-lease parks in order to implement NCGS § 160A-383.1 and to provide affordable housing opportunities for low and moderate income persons.

### 9.6.2 Classification of Manufactured Homes

**A.** The following classification system is hereby adopted for purposes of this Section:

**1.** Manufactured Home - Type I. A single-section manufactured home less than 17 feet in width.

**2.** Manufactured Home - Type II. A multi-section manufactured home greater than or equal to 17 feet in width.

**B.** The width of a manufactured home shall be determined by mean width when all sections are in a final assembly arrangement.

### 9.6.3 Design and Installation Standards for Manufactured Home Parks

**A.** Each application for a manufactured home park as a Special Use Permit is there a choice shall be accompanied by a master plan. The master plan shall show the circulation pattern, manufactured home spaces, permanent structures and other site design requirements that may be considered essential by the Planning and Zoning Commission. The master plan shall show how all proposed improvements will meet the following minimum standards.

**B.** The minimum land area for the entire site shall be 5 acres.

**C.** In lieu of the dimensional and density requirements of §7, Table 7.6.2.A, spaces for manufactured homes shall comply with the criteria set forth in Table 7.6.2- A and 7.6.2-B.

**D.** All manufactured home spaces shall abut upon a paved internal street not less than 24 feet in paved width exclusive of parking.

**E.** All manufactured home spaces shall be served by at least a three-foot all-weather surface sidewalk.

**F.** Four-foot wide all-weather surface sidewalks must serve all common spaces.

**G.** Two off-street paved parking spaces shall be provided for each manufactured home space.

**H.** Each manufactured home park shall have a minimum of 5 percent of the total area set aside and developed for recreational purposes. If a swimming pool is provided, it shall be separated from other uses by a **fence having a gate which is capable of remaining closed - the fence is required by the Health Dept anyway**

**I. Operators of manufactured home parks must provide adequate solid waste refuse and recycling containers. Individual roll-out containers**

**and/or** large dumpsters may be used. Dumpsters shall located at least 40 feet from any manufactured home unit and at least 10 feet away from internal residential streets. Recycling containers shall be emptied on a regular basis and shall be the responsibility of the park operator.

**J.** A manufactured home park must be served by an approved community or public water service. Approved community or public sewer shall be required.

**K.** Adequate illumination shall be provided to ensure the safe movement of pedestrians and vehicles at night. Permanent buildings designed for and used by park residents shall remain illuminated to at least the level of 40-foot candles at all times.

Stopped here Monday night.

| *STANDARD* | *MANUFACTURED HOME TYPE I (SINGLE-SECTION)* | *MANUFACTURED HOME, TYPE II (DOUBLE-SECTION)* |
|---|---|---|
| Area of Space (square feet) | 4,000 | 5,000 |
| Width of Space (feet) | 40 | 50 |
| Depth of Space (feet) | 100 | 100 |
| Front Yard (in feet, measured from pavement edge of internal street to manufactured home) | 20 | 20 |
| Side Yard (in feet, between manufactured homes or permanent buildings) | 25 | 25 |

## 9.7 Public Interest Development (PID) District

### 9.7.1 Purpose

It is the purpose and intent of this Section to permit the creation of Public Interest Development Districts (PID) in areas designated by the City Council as having special and substantial public interest, by virtue of unique environmental, economic, cultural, entertainment, or other characteristics or conditions not generally shared by other areas of the City. It is further intended that such districts and the regulations established therein shall be in accord with and promote the policies set forth in the City's Comprehensive Plan. Because the PID addresses situations which affect the entire region, which create intermittent or unusual impacts and public benefits, and which require flexibility in the administration of land use regulations, and in order to avoid the potential for abuse of the PID rezoning process, it is the intent of this Section that only the existing PID districts, will be permitted within the jurisdiction of the City. The three PID districts are:

- Charlotte Motor Speedway as adopted in City Council ordinance # 99-13 that incorporated zoning case Z-37-98. The standards and provisions of the ordinance and zoning case are incorporated into this ordinance by reference as if written out herein
- Carolinas Medical Center Northeast
- Cabarrus County Arena and Events Center

### 9.7.2 Permitted Uses

The uses and signage permitted in a PID district shall be regulated as set forth in the PID application, as amended and approved by the Planning and Zoning Commission and/or Concord City Council. Additionally, signage/banners that have been approved through licensing agreements between Concord City Council and the property owner(s) and have received NCDOT approval are permitted.

### 9.7.3 Effect of PID Designation

A PID may be created as either a new district which completely replaces the existing zoning for a specific area, or may be created as an overlay district which supplements the existing underlying zoning districts. Subsequent to designation as a PID, all property within the district shall be developed in accordance with the standards of the district and other applicable requirements of the City of Concord.

### 9.7.4 Application of A PID Designation

Application for a PID may be initiated by the City Council or the Planning & Zoning Commission, or by the owner of a property for which a PID district is sought to be designated. Each application shall include a unique designation which clearly identifies the proposed district and shall include the information listed below:

**A.** Statement of Intent specifying the nature of the special and substantial public interest involved and the objectives to be promoted by special regulations.

**B.** Proposed District boundaries, including any subareas, which must include a map of the proposed district and may utilize narrative descriptions and /or other references to further define the proposed area.

**C.** A statement as to whether the proposed district is a replacement district or an overlay district.

**D.** Proposed regulations and/or modifications to regulations, which by virtue of the unique characteristics of the district, are appropriate and reasonable to protect the public's interest in the area.

**E.** Procedures for the administration of the regulations in the district which may include processes unique to the district.

**F.** A conceptual plan which depicts the general nature of the proposed district and the general distribution of the uses allowed in the district.

### 9.7.5 Limitations

Applications for PID classification shall only be considered for tracts larger than 25 acres, unless the petition would add land to a previously established PID.

## 9.8 Historic Preservation Overlay (HPOD) Districts

### 9.8.1 Purpose

Concord's designated historic districts, hereinafter referred to as the "districts," and historic landmarks, hereinafter referred to as "landmarks" are some of the most valued and important assets of the City of Concord. They are established for the purpose of protecting and conserving the heritage of the City of Concord, County and State; for the purpose of safeguarding the character and heritage of the districts by preserving the districts as a whole and any property therein that embodies important elements of their social, economic, cultural, political, or architectural history; for the purpose of promoting the conservation of such districts or landmarks for the education, pleasure and enrichment of residents of the districts and the City of Concord, County and State as a whole; for the purpose of fostering civic beauty; and for the purpose of stabilizing and enhancing property values throughout the districts as a whole, thus contributing to the improvement of the general health and welfare of the City of Concord and the residents of the districts.

### 9.8.2 Historic District Establishment

**A.** The historic districts are hereby established as districts which overlap and overlay existing zoning districts, the extent and boundaries of which are as indicated on the official zoning map for the City of Concord. The boundaries of the districts are as shown on the Official Zoning Map of the City of Concord.

**B.** Historic districts, as provided for in this section, may from time-to-time be designated, amended, or repealed, provided; however, that no district shall be recommended for designation unless it is deemed to be of special significance in terms of its historical, prehistorical, architectural, or cultural importance. Such districts must also possess integrity of design, setting, workmanship, materials, feeling, and/or association. No district shall be designated, amended**,** or repealed until the following procedure has been carried out:

**1.** An investigation and report describing the significance of the buildings, structures, features, sites, or surroundings included in any such proposed district, and a description of the boundaries of such district has been prepared, and;

**2.** The Department of Cultural Resources, acting through the State Historic Preservation Officer or his or her designee, shall have made an analysis of and recommendations concerning such report and description of proposed boundaries. Failure of the Department to submit its written analysis and recommendations to the City Council within 30 calendar days after a written request for such analysis has been received by the Department of Cultural Resources shall relieve the City Council of any responsibility for awaiting such analysis, and the City Council may at any time thereafter take any necessary action to adopt or amend its Zoning Ordinance.

**C.** The City Council may also, in its discretion, refer the report and the proposed boundaries to any other interested body for its recommendations prior to taking action to amend the Zoning Ordinance.

**D.** With respect to any changes in the boundaries of such district subsequent to its initial establishment, or the creation of additional districts within the jurisdiction, the investigative studies and reports required by subsection (1) of this section shall be prepared by the Commission and shall be referred to the Planning and Zoning Commission for its review and comment following review by the State Historical Planning Office (SHPO). The P&Z C shall review and comment on the proposal in 60 days from the date the P&Z Commission first receives the proposal. If the Commission makes no recommendation in 60 days, the matter shall be returned to the HPC for further action, including forwarding to the City Coucil without a recommendation. Changes in the boundaries of an initial district or proposal for additional districts shall be submitted to the Department of Cultural Resources in accordance with the provisions of subsection (2) of this section.

**E.** Upon receipt of the Concord Historic Districts Handbook and recommendations, the City Council may proceed in the same manner as

would otherwise be required for the adoption or amendment of any appropriate Zoning Ordinance provisions.

### 9.8.3 Historic Landmark Establishment

**A.** Upon complying with the required landmark designation procedures set forth herein, the City Council may adopt and from time-to-time amend or repeal an ordinance designating one or more historic landmarks. No property shall be recommended for designation as a landmark unless it is deemed and found by the Commission to be of special significance in terms of its historical, prehistorical, architectural, or cultural importance, and to possess integrity of design, setting, workmanship, materials, feeling, and/or association.

**B.** The ordinance shall describe each property designated in the Ordinance, the name or names of the owner or owners of the property, those elements of the property that are integral to its historical, architectural or prehistorical value, including the land area of the property so designated, and any other information the governing board deems necessary. For each building, structure, site, area or object so designated as a landmark, the ordinance shall require that the waiting period set forth in this ordinance be observed prior to its demolition. A suitable sign for each property designated as a landmark may be placed on the property at the owner's consent; otherwise the sign may be placed on a nearby public right-of-way.

**C.** No property shall be designated as a landmark until the following steps have been taken:

**1.** As a guide for the identification and evaluation of landmarks, the Commission shall, at the earliest possible time and consistent with the resources available to it, undertake an inventory of properties of historical architectural, prehistorical, and cultural significance with Concord.

**2.** The Commission shall make or cause to be made an investigation and report on the historic, architectural, prehistorical, educational, or cultural significance of each building, structure, site, area, or object proposed for designation or acquisition. Such report shall be forwarded to the Division of Archives and History, North Carolina Department of Cultural Resources.

**3.** The Department of Cultural Resources, acting through the State Historic Preservation Officer, or his/her designee, shall either upon request of the Department or at the initiative of the Commission be given an opportunity to review and comment upon the substance and effect of the designation of any landmark. All comments will be provided in writing. If the Department does not submit its comments to the Commission within 30 days following receipt by the Department of the report, the Commission and the City Council shall be relieved of any responsibility to consider such comments.

**4.** The P&Z C shall review and comment on the proposal in 60 days from the date the P&Z C first receives the proposal. If the C makes no recommendation in 60 days, the matter shall be returned to the HPC

for further action, including forwarding to the CC without a recommendation.

5. The Commission and the City Council shall hold a joint public hearing (or separate public hearings) on the proposed ordinance. Reasonable notice of the time and place thereof shall be given.

6. Following the public hearings(s), the City Council may adopt the ordinance as proposed, adopt the ordinance with any amendments it deems necessary, or reject the proposed ordinance.

7. Upon adoption of the ordinance, the owners and occupants of each landmark shall be given written notification of such designation insofar as reasonable diligence permits. One copy of the ordinance and amendments thereto shall be filed by the Commission in the office of the Register of Deeds of Cabarrus County. Each landmark shall be indexed according to the name of the owner of the property in the grantor and grantee indexes in the Register of Deeds office and the Commission shall pay a reasonable fee for filing and indexing. A second copy of the ordinance and all amendments thereto shall be kept on file in the office of the Concord City Clerk and be made available for public inspection at any reasonable time. A third copy of the ordinance and all amendments thereto shall be given to the building inspector. The fact that a building, structure, site, area, or object has been designated a landmark shall be clearly indicated on all tax maps maintained by Cabarrus County for such period as the designation remains in effect.

8. Upon the adoption of the landmark ordinance or any amendments thereto, it is the duty of the Commission to give notice thereof to the tax supervisor of Cabarrus County. The tax supervisor in appraising it for tax purposes shall consider the designation and any recorded restrictions upon the property limiting its use for preservation purposes.

### 9.8.4 Permitted Uses

The districts contain several zoning classifications. All uses permitted in any such district, whether by right or as a special exception, shall be permitted in the historic districts according to the procedures established for such uses.

### 9.8.5 Dimensional Regulation

**A.** Structures within the historic districts shall observe the dimensions and other regulations of this Ordinance, except as follows:

**B.** No structures or part thereof shall extend nearer to or be required to be set back further from the front lot line than the average distance of the setbacks of the nearest principal buildings within 300 feet on each side of such building and fronting on the same side of the street.

**C.** Building height and setbacks shall be governed by the underlying zoning district and table 7.6.2.B.

### 9.8.6 Authentic Restoration or Reconstruction

Permitted Subject to Approval of Historic Preservation Commission and Planning and Zoning Commission, Although Not Complying with Dimensional Regulations.

**A. Initial Approval**

Where it is found by the Historic Preservation Commission that an application for a building permit covers activity constituting an authentic restoration or reconstruction in the same location as the original location and in the original conformation of the structure of a structure of historic and/or architectural significance to the historic district, such activity may be approved by the Planning and Zoning Commission, following the approval by the Historic Preservation Commission.

**B. Approval Subject to Conditions**

The Planning and Zoning Commission, in approving such authentic reconstruction or restoration, may attach reasonable and appropriate conditions to the approval, such that the public health, safety and general welfare shall be protected.

**C. Limitation on Approval**

1. The Planning and Zoning Commission shall not be authorized, in action undertaken by this section, to approve a use of property which is not a use permitted by right or as a special exception use within the district in which the property is located.

2. In addition to any other condition the Planning and Zoning Commission may make regarding such authorization, any items restored, reconstructed, or maintained on, over, or within a public sidewalk, public alley area, or other such public way shall be the responsibility of the owner, his heirs and assigns. The owner's restoration, reconstruction, or maintenance of any such item within such area shall constitute the owner's agreement to protect and hold the City of Concord blameless against any and all liability, cost, damage, or expense suffered by the City of Concord as a result of or growing out of the restoration, reconstruction, or maintenance thereof. Such items, so approved, may be lawfully restored, reconstructed, or maintained. Any such item projecting over the vehicular truck way of a street or alley shall be, at its lowest point, 10 feet above the travel way.

### 9.8.7 Parking Waiver

Where the Historic Preservation Commission, in considering an application for a Certificate of Appropriateness, shall find that the number of off-street parking spaces required by the zoning regulations for a building or structure for which a building permit is requested would render the building incongruous with the historic aspects of the district, it shall recommend to the Planning and Zoning Commission a waiver, in part or in whole, of the off-street parking requirements. The Planning and Zoning Commission may authorize a lesser number of off-street parking spaces, provided: (1) the Commission finds that the lesser number of off-street parking spaces will not create problems due to increased on-street parking, and (2) will not constitute a threat to the public safety.

### 9.8.8 Recommendations on Special Exception Applications

All special exception applications within the historic districts shall be reviewed by the Historic Preservation Commission at its next regular meeting after the application has been submitted in accordance with the requirements of this Ordinance. The Historic Preservation Commission shall forward its comments and recommendations within 45 days of the filing of the application. The recommendations shall be presented to the Planning and Zoning Commission which has final decision responsibility on applications for special exceptions.

### 9.8.9 Historic Preservation Commission

Refer to § 2.5.

### 9.8.10 Certificate of Appropriateness

**A. Required**

1. From and after the designation of a landmark or a historic district, no exterior portion of any building or other structure (including masonry walls, fences, light fixtures, steps, and pavement, or other

appurtenant features) no above-ground utility structure nor any type of outdoor advertising sign or business identification sign shall be erected, altered, restored, moved, or demolished on such landmark or within the historic district until after an application for a Certificate of Appropriateness as to exterior features has been submitted to and approved by the Historic Preservation Commission. The municipality shall require such a certificate to be issued by the Commission prior to the issuance of a compliance permit or building permit granted for the purposes of constructing, altering, moving, or demolishing structures, which certificate may be issued subject to reasonable conditions necessary to carry out the purpose of this part. A Certificate of Appropriateness shall be required whether or not a building permit or compliance permit is required. Any building permit or such other permit not issued in conformity with this section shall be invalid.

**2.** The City of Concord and all public utility companies shall be required to obtain a Certificate of Appropriateness prior to initiating any changes in the character of street paving, sidewalks, trees, utility installations, lighting, walls, fences, structures and buildings on property, easements, or streets owned or franchised by the City of Concord or public utility companies.

**B. Procedures**

**1.** An application for a Certificate of Appropriateness shall be obtained from and, when completed, filed with the Planning Director. Applications for Certificates of Appropriateness shall be considered by the Historic Preservation Commission at its next regular meeting, provided they have been filed, complete in form and content, at least 28 days prior to the regularly scheduled meeting of the Commission; otherwise, consideration shall be deferred until the following meeting.

**2.** The Commission shall, by uniform rule in its Rules of Procedure, require data as are reasonably necessary to determine the nature of the application. An application for a Certificate of Appropriateness shall not be considered complete until all required data have been submitted. Nothing shall prevent the applicant from filing with the application additional relevant information bearing on the application.

**3.** Upon receipt of an application, the Administrator shall notify the Historic Preservation Commission at least seven calendar days before its regularly scheduled meeting.

**4.** Prior to issuance or denial of a Certificate of Appropriateness, the Commission shall conduct a public hearing in accordance with § 3.1.7. The Administrator shall be responsible for notifying the affected parties per § 3.1.5.

**5.** The Commission shall take action on the application and in doing so shall apply the Review Criteria, contained in § 4.12.11.

**6.** The Commission's action on the application shall be approval, approval with modifications, or disapproval.

7. Prior to final action on an application, the Commission, using the guidelines in § 4.12.11, shall make findings of fact indicating the extent to which the application is or is not congruous with the historic aspects of the district.

8. The Commission shall cause to be entered into the minutes of its meeting the reasons for its action, whether it be approval, approval with modifications, or denial.

9. If the Commission fails to take final action upon any application within 180 days after the complete application is submitted to the Planning Director, the application shall be deemed to be approved.

10. If the Commission determines that a Certificate of Appropriateness should not be issued, a new application affecting the same property may be submitted only if substantial change is made in plans for the proposed construction, reconstruction, alteration, restoration or moving.

### 9.8.11 Review Criteria

#### A. Intent

1. It is the intention of these regulations to insure, insofar as possible, that construction, reconstruction, alteration, restoration, moving, or demolition of buildings, structures, appurtenant fixtures, outdoor advertising signs, or other significant features in the district or of landmarks shall be harmonious with the special character of the district or landmark. However, it is not the intention of these regulations to require the reconstruction or restoration of individual or original buildings or prohibit the demolition or removal of same or to impose architectural styles from particular historic periods. In considering new construction, the Commission shall encourage contemporary design which is harmonious with the character of the district.

2. In granting a Certificate of Appropriateness, the Commission shall take into account the historic or architectural significance of the structure under consideration and the exterior form and appearance of any proposed additions or modifications to that structure as well as the effect of such change or additions upon other structures in the vicinity.

3. The Commission shall take no action under this ordinance except to prevent the construction, reconstruction, alteration, restoration, moving, or demolition of buildings, structures, appurtenant features, outdoor advertising signs, or other significant features which would be incongruous with the special character of the historic district or landmark.

#### B. Exterior Form and Appearance

1. The following criteria shall be considered, when relevant, by the Commission in reviewing applications for a Certificate of Appropriateness. All applications for Certificates of Appropriateness shall be subject to review based upon the Design **Guidelines then in**

effect. These guidelines are set forth in a manual prepared and adopted by the Commission:

**A.** lot coverage, defined as the percentage of lot area covered by primary structures;

**B.** setback, defined as the distance from the lot lines to the building(s);

**C.** building height;

**D.** spacing of buildings, defined as the distance between adjacent buildings;

**E.** exterior building materials;

**F.** proportion, shape, positioning, location, pattern and sizes of any elements of fenestration;

**G.** surface textures;

**H.** roof shapes, forms and materials;

**I.** use of local or regional architectural traditions;

**J.** general form and proportions of buildings and structures, and relationship of any additions to the main structure;

**K.** expression of architectural detailing, such as lintels, cornices, brick bond, and foundation materials;

**L.** orientation of the building to the street;

**M.** scale, determined by the size of the units of construction and architectural details in relation to the size of man and also by the relationship of the building mass to adjoining open space and nearby buildings and structures;

**N.** proportion of width to height of the total building facade;

**O.** archaeological sites and resources associated with standing structures;

**P.** appurtenant fixtures and other features such as lighting;

**Q.** structural condition and soundness;

**R.** walls--physical ingredients, such as brick, stone or wood walls, wrought iron fences, evergreen landscape masses, building facades, or combination of these;

**S.** ground cover or paving;

**T.** maintenance of pedestrian scale and orientation as well as provision for safe pedestrian movement;

**U.** color (new construction only and not for existing residences); and

**V.** effect of trees and other landscape elements.

2. The Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" shall be the sole principles and guidelines used in reviewing applications of the State of North Carolina for Certificates of Appropriateness.

C. Interior arrangement or design shall be exempt from review by the Historic Preservation Commission. Interior construction and/or reconstruction shall not require a Certificate of Appropriateness.

**9.8.12 Certain Changes Not Prohibited**

Nothing in this article shall be construed to prevent the ordinary maintenance or repair of any exterior architectural feature in the historic district which does not involve a substantial change in design, material, or outer appearance thereof, nor to prevent the construction, alteration, restoration, or demolition of any such feature which the Building Inspector, Zoning Enforcement Officer or similar official shall certify in writing to the Commission is required by the public safety because of an unsafe or dangerous condition. Nothing herein shall be construed to prevent (a) the maintenance, or (b) in the event of an emergency, the immediate restoration, of any existing above-ground utility structure with approval by the Commission.

### 9.8.13 Delay In Demolition

**A.** An application for a Certificate of Appropriateness authorizing the demolition, removal, or destruction of a designated landmark or a building structure or site within a historic district may not be denied. However, the effective date of such a certificate may be delayed for a period of up to 365 days from the date of approval. The period of delay shall be reduced by the Commission if it finds that the owner should suffer extreme hardship or be permanently deprived of all beneficial use or return from such property by virtue of the delay. During the delay period the Commission shall negotiate with the owner in an effort to find a means of preserving the building, structure, or site. If the Commission finds that a building, structure, or site has no special significance or value toward maintaining the character of a district, it shall waive all or part of such period of delay and authorize earlier demolition or removal.

**B.** In the case of action initiated by the City, the application for such a certificate will first be reviewed by the Commission and secondly by the City Council for final order of demolition or removal. The Commission shall consider the Housing Code Officer's inspections and recommendations for demolition or removal of the building or structure.

**C.** If the Commission has voted to recommend the designation of a landmark or the designation of an area as a historic district and the final designation has not been made by the City Council, the demolition or destruction of any building, structure, or site in the proposed district or on the property of the designated landmark may be delayed by the Commission for up to 180 days or until the City Council takes final action on the designation, whichever occurs first.

### 9.8.14 Application Review by Commission

As part of its review procedure, the Commission may view the premises and seek the advice of the Department of Cultural Resources or other expert advice as it may deem necessary under the circumstances.

### 9.8.15 Appeal of Decision

**A.** In any action granting or denying a Certificate of Appropriateness, an appeal by an aggrieved party may be taken to the Board of Adjustment.

**B.** Written notice of the intent to appeal must be sent to the Commission, postmarked within 30 days following the decision. Appeals shall be in the nature of certiorari. The Superior Court of Cabarrus County shall hear appeals of decisions of the Board of Adjustment.

**C.** The State of North Carolina shall have a right of appeal to the North Carolina Historical Commission, which shall render its decision with 30 days from the date that a notice of appeal by the state is received by the Historical Commission. The decision of the Historical Commission shall be final and binding upon both the State and the Commission.

### 9.8.16 Compliance

**A.** The Administrator shall enforce compliance with the terms of the Certificate of Appropriateness. Failure to comply with a Certificate of Appropriateness shall be a violation of the Zoning Ordinance. The discontinuance of work or the lack of progress toward achieving compliance with a Certificate of Appropriateness for a period of six months shall be considered as a failure to comply with a Certificate of Appropriateness.

**B.** Nothing contained in this Ordinance shall prohibit, impair, or limit in any way the power of the City Council to prevent the construction, reconstruction, alteration, restoration, or removal of buildings, structures, appurtenant fixtures, or outdoor signs in the Historic Districts in violation of the provisions of this Ordinance. The enforcement of any remedy provided herein shall not prevent the enforcement of any other remedy or remedies provided herein or in other ordinances or laws. (See General Statute 160A-175 and 160A-389.)

## 9.9 Airport Overlay (AOD) District

### 9.9.1 Purpose

This district is established to prevent the creation or establishment of obstructions or land uses that are hazards to air navigation, thereby protecting the lives and property of the users of the Concord Regional Airport, the property and occupants of land in the vicinity and the public investment in the airport. This district is further intended to provide for the safe landing, take-off, and maneuvering of aircraft in accordance with Federal Aviation Administration (FAA) standards.

### 9.9.2 Location

The AO Overlay District shall overlap and overlay the base zoning districts. The former City of Concord Airport Overlay District (AO) designated pursuant to the former City of Concord Zoning Ordinance § 790, is hereby designated as the AO Overlay District. Said overlay district may be expanded by adding additional land area from time to time by an amendment to this Ordinance.

### 9.9.3 Principal and Accessory Uses

Permitted principal uses, special uses and accessory uses shall be those within the underlying zoning district as set forth in Table 8.1.7, provided that no use shall be made of land or water within any zone established by these regulations in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, attract birds or other concentrations of wildlife or otherwise in any way create a hazard or endanger the landing, take-off or maneuvering of aircraft intending to use the airport.

### 9.9.4 Use Restrictions

Notwithstanding any other provisions of these regulations, no use may be made of land or water within any zone established by these regulations in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, attract birds or other concentrations of wildlife or otherwise in any way create a hazard or endanger the landing, take-off or maneuvering of aircraft intending to use the airport.

### 9.9.5 Area Regulations

Dimensional requirements such as lot size and building depth shall be governed by the underlying zoning districts. Height requirements shall be governed by the General Development Standards § 9.9.6, but in no event shall the height of any structure exceed the maximum height permitted by the underlying zoning district.

### 9.9.6 General Development Standards

In order to carry out the provisions of these regulations, there are hereby created and established within the Concord Regional Airport certain zones which include

all of the land lying within the approach zones, transitional zones, horizontal zones and conical zones, as they apply to the more restrictive height limitation. Such zones are shown on the Official Concord Regional Airport Hazard Zoning Map which is attached to these regulations and made a part hereof. An area located in more than one of the following zones shall be subject to the Airport Overlay District The various zones are hereby established and defined in Column (B) of Table 9.5-1. Except as otherwise provided in these regulations, no structure or tree shall be erected, altered, allowed to grow or be maintained in any of the zones created by these regulations to a height in excess of the applicable height limit herein established for such zone. Unless otherwise specified, the height shall be measured from mean sea level. Such applicable height limitations are hereby established for each of the zones in Column (C) of Table 7.13-1.

**Table 9.5-1**

| (A)<br>ZONE | (B)<br>DESCRIPTION | (C)<br>HEIGHT RESTRICTION |
|---|---|---|
| **PRECISION INSTRUMENT RUNWAY APPROACH ZONE** | The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to a width of 16,000 feet at a horizontal distance of 50,000 feet from the primary surface, its center line being the continuation of the center line of the runway. | Slopes upward 50 feet horizontally for each foot vertically beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway center line, then at a slope of 40:1 for an additional 40,000 feet. |
| **LOCAL BUFFER APPROACH ZONE** | The extent of this zone coincides with the **PRECISION INSTRUMENT RUNWAY APPROACH ZONE** as described above. | Uses shall not exceed the maximum height specified for the **PRECISION INSTRUMENT RUNWAY APPROACH ZONE** less ten (10) feet on southern approach only. Uses encroaching into this zone shall be allowed only as special uses, and shall not be constructed, erected, or otherwise established unless and until a special use permit has been issued. |

| (A)<br>ZONE | (B)<br>DESCRIPTION | (C)<br>HEIGHT RESTRICTION |
|---|---|---|
| **TRANSITIONAL ZONES** | These zones are hereby established as the area beneath the transitional surfaces. These surfaces extend outward and upward at 90-degree angles to the runway center line and the runway center line extended a slope of seven feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional zones for those portions of the precision approach zones, which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach zones and at 90-degree angles to the extended runway center line. | Slopes upward and outward seven feet horizontally for each foot vertically beginning at all the sides of and at the same elevation as the primary surface and the approach zones and extending to a height of 150 feet above the airport elevation, or 840 feet above mean sea level. In addition to the foregoing, there are established height limits sloping upward and outward seven feet horizontally for each foot vertically beginning at the sides of and at the same elevation as the approach zones and extending to where they intersect the conical surface. Where the precision instrument run approach zone projects beyond the conical zone, height limits sloping upward and outward seven feet horizontally for each foot vertically shall be maintained beginning at the sides of and at the same elevation as precision instrument runway approach surface and extending to a horizontal distance of 5,000 feet from the edge of the approach surface measured at 90-degree angles to the extended runway center line. |
| **HORIZONTAL ZONE** | The horizontal zone is hereby established by swinging arcs of 10,000 feet radii from the center of each end of the primary surface of each runway and connection the adjacent arcs by drawing lines tangent to those arcs | One hundred fifty feet about the airport elevation or a height of 840 feet above mean sea level. |
| **CONICAL ZONE** | The conical zone is hereby established as the area that commences at the periphery of the horizontal zone and extends outward there from a horizontal distance of 4,000 feet. | Slopes upward and outward 20 feet horizontally for each foot vertically beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation, or 1.040 feet above mean sea level. |

### 9.9.7 Nonconforming Uses

**A.** The regulations prescribed by this Ordinance shall not be construed to require the removal, lowering or other changes or alteration of any structure or tree not conforming to the regulations as of the effective date of these regulations, or otherwise interfere with the continuance of a nonconforming

use. Nothing contained herein shall require any change in the construction, alteration or intended use of any structure, the construction or alteration which was begun prior to the effective date of these regulations, and is diligently prosecuted.

**B.** No zoning clearance permit shall be granted that would allow the expansion of a nonconforming use, structure or tree to become a greater hazard to air navigation than it was on the effective date of these regulations when the application for a permit is made.

**C.** Whenever the Administrator determines that a nonconforming tree or structure has been abandoned or more than 80 percent torn down, physically deteriorated or decayed, no zoning clearance permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations.

**D.** Notwithstanding the preceding provision of this Section, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation and maintenance thereon of such markers and lights as shall be deemed necessary by the Administrator after consultation with the Concord Regional Airport Aviation Director to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport hazards. Such markers and lights shall be installed, operated and maintained at the expense of the City of Concord.

### 9.9.8 Public Notification of Potential Aircraft Noise Impacts

Public notification of the potential aircraft noise impacts made to prospective purchasers of property within the Airport Overlay District shall be made in accordance with the provisions of this subsection.

**A.** Where public notification statements are required or provided for property within the district, the following statement shall be used: "This property is located within the City of Concord Airport Overlay District and is subject to aircraft over flights and to aircraft noise that may be objectionable dependent upon the use and location of the property."

**B.** In accordance with the N.C. Residential Property Disclosure Act (NCGS 47E), all owners of property and their agents shall provide a public notification statement to all prospective purchasers through a written disclosure statement.

**C.** A public notification statement shall appear on the recorded final plat for all subdivisions and approved site plans for residential development of land within the district. In addition, the developer/owner shall provide public notice to all prospective dwelling unit purchasers through a written disclosure statement.

## 9.10 Copperfield Boulevard Corridor Overlay (CBCOD) District

### A. Purpose

This district is established to provide flexibility for nonresidential-zoned areas that abut established residential neighborhoods along Copperfield Boulevard. The district shall function to flexibly limit the uses which have undesirable characteristics of smoke, odor or noise emission, storage of hazardous materials, high traffic generation, or other characteristics which may adversely affect the aesthetic appearance of the area, or the health, safety, and general welfare of nearby residents, or motorists traveling through the area. The Copperfield Boulevard Corridor Overlay District shall overlap and overlay existing zoning districts.

### B. District Boundaries

The boundaries of the Copperfield Boulevard Corridor Overlay shall be that which is displayed on the Official Zoning Map for the City of Concord. The boundaries of the Copperfield Boulevard shall be those of the former Use Restricted Overlay District (UROD) as adopted on the 11th day of February, 1993.

### C. Permitted Uses

Permitted uses and/or Special Uses shall be those within the underlying zoning districts and is listed in Table 8.1.7, except that the following uses shall be prohibited within the CBCOD as established by Ordinance on the 11th day of February, 1993: Accessory Uses shall be those permitted in the underlying zoning districts as set forth in § 5.2.

| Use |
|---|
| Animal Services, except Veterinary |
| Automobile Repair Shops |
| Car Washes |
| Cemeteries |
| Coin Operated Amusement Devices |
| Contractors, General Building and Special Trade (with outside storage only) |
| Drycleaning Plants, Except Rug Cleaning |
| Heavy Construction Equipment Rental and Leasing |
| Industrial Launderers |
| Karate and JCDO Instruction |
| Miscellaneous Repair Services (of any item not sold on the premises) |
| Mobile Homes on Individual Lots |
| Mobile Home Parks |
| Motorcycle Sales |
| Multifamily |
| Pawn Shops |
| Rehabilitation Hospitals: Drug Addiction and Alcoholism |
| Reupholstery and Furniture Repair |
| Self-storage and Mini-warehousing (self-service storage facilities) |
| Taxicab Stands and Operations |

Truck Driving Schools

**D. Dimensional Regulations**

All dimensional regulations shall be governed by the underlying zoning district as set forth in Table 7.6.2.

**E. Off-Street Parking/Loading and Vehicular Access**

Standards for off-street parking/loading spaces and vehicular access areas shall be determined by the minimum requirements as set forth in Article 8.

**F. Sign Regulations**

Sign shall be regulated in accordance with the standards set forth in Article 12.

**G. Landscaping and Buffering**

Standards for landscaping and buffering areas shall be determined by the minimum requirements as set forth in Article 11.

## 9.11 Low Impact Development (LID)

The use of LID site design techniques is encouraged in residential and non-residential development throughout the City of Concord. LID is encouraged by allowing innovative site design and flexibility in combination with traditional means of controlling stormwater runoff.

### 9.11.1 Purpose

The goal of the LID Zoning Overlay is to develop site design techniques, strategies, Best Management Practices (BMPs), and other criteria to store, infiltrate, evaporate, transpire, retain, and detain storm water runoff on the site to replicate pre-development runoff characteristics and mimic the natural and unique hydrology of the site. Because multiple aspects of site development impact the hydrologic response of the site, LID runoff control techniques also can address many aspects of site development. There is a wide array of impact reduction and site design techniques that allow the site designer to create storm water control mechanisms that function in a similar manner to natural control mechanisms. The net result is to resemble as closely as possible, the site's pre-development hydrology by preserving and/or recreating the watershed's natural hydrologic functions or water balance between runoff, infiltration, storage, ground water recharge, and evapotranspiration. With the LID approach receiving waters experience little change in the volume, frequency, or quality of runoff or in the base flows fed by ground water and precipitation. Specifically, LID is designed to:

**A.** Promote storm water management practices that maintain pre-development hydrology through site design, site development, building design and landscape design techniques that infiltrate, filter, store, evaporate and detain storm water close to its source;

**B.** Protect natural resources, particularly streams, lakes, wetlands, floodplains and other natural aquatic systems on the development site and elsewhere from degradation that could be caused by construction activities and post-construction conditions;

**C**. Protect other properties from damage that could be caused by storm water and sediment during construction activities and post-construction conditions on the development site, while insuring that detention measures do not negatively effect the overall hydrology of the site;

**D.** Reduce and disperse, throughout the site, the storm water from impervious surfaces such as streets, parking lots, rooftops and other paved surfaces, and minimize the storm water's impact on the environment;

**E.** Protect public safety by minimizing flooding and stream bank erosion, reduce public expenditures in removing sediment from stormwater drainage systems and natural resource areas, and to prevent damage to municipal infrastructure caused by inadequate stormwater controls; and

**F.** Complement and assist in implementing Article 4 (Environmental/Land Disturbing Activities) and the City's current Phase 2 National Pollution Discharge Elimination System (NPDES) Stormwater Permit and NCGS §143-215.1 et seq.

### 9.11.2 Grading and Clearing Prohibited Without Prior Approval

No land disturbance shall occur on a site proposed for an LID project prior to its approval. Proposed LID projects on recently cleared land shall demonstrate hydrology comparable to its pre-cleared status.

### 9.11.3 Development Types and Processing Procedures

**A.** Residential LID developments shall be allowed by right without a rezoning when determined to be low-density development, provided that the proposed residential uses and densities are permissible within the underlying zoning district. Low-density development is either no more than two dwelling units per acre or the total built upon area is no more than 24% within a single project area or master planned area.

**B.** Residential LID developments shall be allowed with a conditional district rezoning when determined to be high-density development. High-density development is either more than two dwelling units per acre or when the total built upon area is more than 24% within a single project area or master planned area.

**C**. Non-residential developments meeting the LID standards of this Article shall be allowed by right without a rezoning, whether considered low-density or high-density development, provided that the non-residential uses proposed are permissible within the underlying zoning district.

### 9.11.4 Procedures for LID Approvals

An LID that requires a rezoning as specified above shall be processed as a conditional district zoning map amendment (rezoning) following the process outlined in § 3.3. Constituent parts of the conditional district may require further approvals, including but not limited to, site plan, subdivision or special use permit. LID projects that do not require a conditional district zoning map amendment shall be reviewed by the Development Review Committee (DRC) and processed as a conventional project.

Prior to formally submitting an application, the applicant shall schedule a pre-application meeting with the Administrator and the Stormwater Services Director and/or their designees. This meeting is intended to review the proposed development, review the applicable standards and agree upon the methodology and guidelines for review of the proposed development, and to determine preliminary compliance with the LID standards. Additionally, as part of the pre-application, a meeting on-site shall occur. This meeting is intended to allow the staff to become familiar with the specific site relative to the physical features, and to determine preliminary compliance with the guidelines.

### 9.11.5 Zoning Map Designation

Upon approval of an LID project/related map amendment, the zoning map shall denote the letters LID followed by zoning case number.

### 9.11.6 Low Impact Development Stormwater Management Application Materials

For all LID projects, the following information shall be presented on a plan or plans drawn to scale with supporting documents and technical details as necessary. This information may also be incorporated into a preliminary subdivision plat or site plan, as required by Article 5.

**A**. An existing condition site assessment providing baseline information on features including slope profiles showing existing gradients, soil types, tree canopy and

other vegetation, natural water bodies, wetlands and sensitive natural communities, and site features that aid in stormwater management including natural drainage ways and forested and vegetated lands located on stream and wetland buffers.

**B.** A site plan illustrating the proposed development of the subject property.

**C.** A conceptual erosion and sediment control plan that incorporates accepted management practices as required by the State of North Carolina.

**D.** A conceptual stormwater management plan identifying the limits of grading, clearing and construction disturbance area and demonstrating that stormwater runoff is minimized through the use of natural drainage systems and on-site infiltration and treatment techniques. The plan (or supporting materials) shall also demonstrate how the proposed post-development hydrology of the site compares with the pre-development hydrology. The plan shall demonstrate that the soils best suited for infiltration (if any are present) are retained and that natural areas consisting of tree canopy and other vegetation are preserved, preferably in contiguous blocks or linear corridors where feasible, for protection of the best stormwater management features identified in the site assessment. The plan shall also clearly indicate proposed tree protection zones necessary to protect the root systems from construction traffic.

**E.** Additional information deemed necessary by the Administrator and/or the Stormwater Services Director as a result of the pre-application meeting.

**F.** For reference purposes and technical guidance, the applicant shall refer to "Low Impact Development – A Guidebook for North Carolina," published in June 2009 (as amended) by the North Carolina Cooperative Extension.

Specific components of the above application materials shall be prepared by an expert team consisting of (but not limited to) a number of following professionals, licensed to practice in the State of North Carolina (as applicable): Architect, Landscape Architect, Civil Engineer, Land Surveyor, Land Planner, Biologist, or Botanist.

### 9.11.7 General Requirements

**A.** The use of LID design approaches is required and shall be implemented to the maximum extent practical given the site's soil characteristics, slope, and other relevant factors.

**B.** All applications for development are subject to Sections 4.2 (Water Supply Source Watershed Protection) and 4.4 (Stormwater Control) and to the following post-construction stormwater management standards and guidelines to ensure that stormwater management approaches that maintain natural drainage patterns and infiltrate precipitation are utilized to the maximum extent practical. Additionally, all LID projects shall meet all minimum standards of the Concord Development Ordinance, unless specified otherwise in Section 9.11. LID projects are also

subject to the National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Permit issued by the State of North Carolina.

**C.** Construction of all stormwater control measures and devices shall be in accordance with the most recent edition of "The Division of Water Quality Stormwater Best Management Practices Manual" (NCDENR Stormwater BMP Manual). Maintenance of stormwater control measures and devices shall be governed by Section 4.4.6.

### 9.11.8 Specific Requirements

One main feature of Low Impact Development is that the post-construction condition mimics the natural hydrologic functions of infiltration, runoff and evapotranspiration. LID projects are required to demonstrate compliance with the following specific requirements.

**A. Stormwater Analysis**

Each application for LID shall include an engineering analysis that compares the pre-development and post-development hydrology of the site. This analysis shall demonstrate that the post-development volume of runoff, infiltration and evaportanspiration for each site substantially matches pre-development volumes of runoff, infiltration and evapotranspiration. Specifically, the analysis shall include the pre-development water balance (annual runoff, infiltration, and evapotranspiration volumes or percentages) and post-development water balance (annual runoff, infiltration, and evapotranspiration volumes or percentages.) For the purposes of this Section, substantially similar shall be defined as being within five percent (5%) of the hydrologic fate values for mature forest as illustrated in Table 9.11.8 for residential projects and within fifteen percent (15%) for nonresidential projects.

**Table 9.11.8 – Hydrologic Fate for Rainfall in Mature Forested Conditions - Piedmont Region**

| Hydrologic Fate | |
|---|---|
| Evapotranspiration | 69% |
| Infiltration | 29% |
| Runoff | 3% |

*Source: "Low Impact Development: A Guidebook for North Carolina- 2009"*

**B. Compliance With NPDES Phase II Permit**

The application materials shall demonstrate compliance with all requirements of the National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Permit, issued by the State of North Carolina, including, but not limited to the following:

**1.** LID development may be permitted as low density projects if it meets the following criteria:

**A**. No more than two dwelling units per acre or 24% built-upon area;

**B.** Use of vegetated conveyances to the maximum extent practicable;

**C.** All built-upon areas are at least 30 feet landward of perennial and

intermittent surface waters; and

**D.** Deed restrictions and protective covenants acceptable to the City are required by the locally issues permit and incorporated by the development to ensure that subsequent development activities maintain the development (or redevelopment) consistent with the approved plans.

**2.** High density LID projects shall meet the following criteria;

**A.** The stormwater control measures must control and treat the difference between the pre-development and post-development conditions for the 1-year 24 hour storm. Runoff volume drawdown time must be a minimum of 24 hours, but not more than 120 hours;

**B.** All structural stormwater treatment systems must be designed to achieve 85% average annual removal of total suspended solids;

**C.** Stormwater management measures must comply with the General Engineering Design Criteria For All Projects requirements listed in 15A NCAC 2H.1008(c);

**D.** All built-upon areas are at least 30 feet landward of perennial and intermittent surface waters; and

**E.** Deed restrictions and protective covenants acceptable to the City are required by the locally issued permit and incorporated by the development to ensure that subsequent development activities maintain the development (or redevelopment) consistent with the approved plans.

**C. Compliance with Low Impact Development Design Standards and Guidelines**

Standards are statements that express the development and design intentions of this bylaw. The guidelines suggest a variety of means by which the applicant might comply with the standards. The guidelines are intended to aid the applicant in the design process and the City of Concord when reviewing applications. Options for compliance with the standards are not limited to the guidelines listed and alternative standards that meet the intent of the Ordinance and aid in achieving the required post-development hydrologic balance specified in Section 9.11.8 (A) may be considered by the Administrator and the Stormwater Director. These options shall be clearly stated in the application materials, and will be reviewed with the applicant at the pre-application meeting.

Proposed LID projects shall demonstrate substantial compliance with the following four sets of standards. It is recognized that some of these individual guidelines are applicable either only to single family residential or commercial/multifamily development. It is also recognized that each individual guideline may not be feasible or necessary to comply with each standard and to achieve the hydrologic balance specified in Section 9.11.8(A). Additionally, all LID projects shall meet the minimum requirements of Article 4.

**Standard 1: Vegetation and Landscaping**

Vegetative and landscaping controls that intercept the path of surface runoff shall be considered as a component of the comprehensive stormwater management plan.

**Guideline 1.1.** Utilize two-track surfaces with grass in-between drive aisles for

driveways, “turf-stone” type pavers and pervious asphalt/concrete systems for overflow parking areas or shoulders, and landscape medians within roads, parking lots and other drivable or walkable surfaces to provide for water infiltration.

**Guideline 1.2.** Design parking lot and roadway landscaping to function as part of the development’s stormwater management system utilizing vegetated islands with bioretention functions.

**Guideline 1.3.** Incorporate existing natural drainage ways and vegetated channels within street rights-of-way and parking areas, as an alternative to standard concrete curb and gutter configuration to decrease flow velocity and allow for stormwater infiltration, and direction to the appropriate drainage areas on site, as applicable.

**Guideline 1.4.** Divert water from the majority of downspouts on each structure away from driveway surfaces and into bioretention areas, rain gardens or other devices (such as rain barrels or cisterns) to capture, store, and infiltrate stormwater on-site, for future landscape watering. This guideline shall be clearly specified on the site plan/subdivision plat, and shall be indicated on the plot plan prior to issuance of a zoning clearance permit.

**Guideline 1.5.** Utilize vegetative LID stormwater controls (bioretention, swales, filter strips, buffers) as specified in Section 4.43, on land held in common.

**Standard 2: Development on Steep Slopes**

Development on steep slopes equal to or in excess of 25% shall be sited and constructed, and slopes stabilized to minimize risks to surface and ground waters and to protect neighboring properties from damage. For the purposes of these regulations, slope shall be calculated as a ratio of horizontal distance to vertical distance, multiplied by one hundred (100). In instances where the property contains distinct sections of differing slope, the slope of each distinct section may be calculated separately. Calculation of slope will be discussed at the on-site meeting with staff that is required as part of the pre-application process.

**Guideline 2.1.** Minimize development, re-grading and clearing of vegetation on land where the slope is greater than 25%.

**Guideline 2.2.** Encourage development of home sites, subsurface sewage systems and parking areas on the flattest portion of the site, provided that the flattest portion of the site is not environmentally sensitive, such as a 100 year floodplain, floodway or wetland.

**Guideline 2.3.** Minimize crossing steep slopes with roads and driveways and lay them out to follow topographic contours in order to minimize soil and vegetation disturbance.

**Standard 3: Reduce Impervious Surfaces**
Stormwater shall be managed through land development strategies that reduce impervious surface areas such as streets, sidewalks, driveway and parking areas and roofs.

**Guideline 3.1.** Evaluate the minimum widths of all streets and driveways to demonstrate that the proposed width is the narrowest possible necessary to conform to safety and traffic concerns and requirements. For local streets right of ways in the range of forty (40) feet wide should be considered with as little as eighteen (18) foot wide road cross sections, provided that these sections have a minimum passable way of twenty (20) feet with reinforced shoulders. Alternatives to typical curb and gutter should be considered and curb and gutter should be eliminated altogether, as feasible on a case by case basis. Any other minimum rights-of-way widths and pavement/gravel widths will be evaluated for other type of cross section classifications as well. Design for specific terrain classifications shall be consistent with the most recent version of the North Carolina Department of Transportation (NCDOT) Subdivision Manual. If the right-of-way width is not sufficient for utilities placement, additional easements may be necessary elsewhere on the site. Sidewalks may be permitted on only one side of new streets. When pedestrian areas are provided in an alternate location, they should be constructed of permeable materials.

**Guideline 3.2.** Reduce the total length of residential streets by utilizing some of the following design principles: reducing lot widths by incorporating narrower housing styles and utilizing “flag lots” or “pie-shaped lots”, shared driveways and access easements to reduce total lot frontage. Maximum driveway widths may also be reduced on a case-by-case basis. New developments shall meet the minimum connectivity ratio required in Section 10.2.6 (Street Connectivity Requirements), unless exempted as specified in Section 10.2.6(F).

**Guideline 3.3.** Minimize the number of residential street cul-de-sacs and incorporate vegetated islands (as common open space) to reduce total impervious cover. The radius of cul-de-sacs should be the minimum required to accommodate emergency and maintenance vehicles. Consider alternative turn-around areas that require less impervious area, such as “hammerheads”. Rain gardens (vegetated depressions) should be considered in the vegetated islands, and shall be constructed below the subgrade in order to prevent failure of the road structure.

**Guideline 3.4.** Reduce driveway lengths on a case-by-case basis by reducing or eliminating front building and side yard setbacks. Reduced setbacks shall be considered at the time of site plan or preliminary plat approval and shall be part of the approval of the zoning

overlay.

**Guideline 3.5.** Utilize shared driveways for multiple building sites, and construct driveways only to the minimum width permitted for the specific use, as specified in the Technical Standards Manual (TSM).

**Guideline 3.6.** Use permeable pavement or gravel for parking stalls, sidewalks, driveways and bike/pedestrian trails. Overflow parking (facilities with more than the minimum number of spaces, but less than the maximum number of spaces specified in Section 10.3) and parking for assembly uses shall also utilize permeable pavement or turf.

**Guideline 3.6.** Design impervious areas that are "disconnected" or non-contiguous that minimize transfer of stormwater from one impervious area to another, in order to more efficiently disperse stormwater throughout the site.

**Guideline 3.7.** Utilize shared parking for uses with different peak demand periods. Maximum parking limits shall apply, in accordance with Section 10.3 (Parking and Loading)

**Guideline 3.8.** Reduce building footprints by building more than one habitable floor level, and when possible, construct buildings to the maximum permissible building heights. Buildings may also be constructed with parking inside of the building footprint by placing some or all of the living space over the parking.

**Guideline 3.9.** Maximize retention of vegetative cover by grading and clearing only enough land area to accommodate the individual building footprints and street networks. The general areas of grading, clearing and vegetation retention shall be indicated on the conceptual grading and clearing plan. Grading and clearing on individual lots shall be reviewed at the time of permit issuance to insure reasonable compliance with the conceptual grading and clearing plan.

**Standard 4: Low Impact Integrated Management Practices (LIMPs)**
Stormwater shall be managed through the use of small-scale controls to capture, store and infiltrate stormwater close to its source. All stormwater controls shall be compliant with Article 4, the most recent version of "The Division of Water Quality Stormwater Best Management Practices Manual" (NCDENR Stormwater BMP Manual) and the National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Permit issued by the State of North Carolina.

**Guideline 4.1.** Create vegetated depressions, commonly known as bioretention areas or rain gardens that treat runoff from storms of one inch or less and collect runoff and allow for short-term ponding

and slow infiltration. Utilize drainage swales as an alternative to standard curb and gutter.

**Guideline 4.2.** Locate dry wells consisting of gravel or stone-filled pits to catch water from roof downspouts or paved areas.

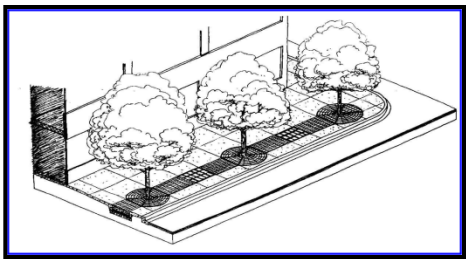
**Guideline 4.3.** Use filter strips or bands of dense vegetation planted immediately downstream of a runoff source to filter runoff before it enters a receiving structure or water body. Natural or man-made vegetated riparian buffers adjacent to water bodies provide erosion control, sediment filtering and habitat. Utilize level spreaders and plunge pools to disperse water throughout the site in lieu of discharge into a single point source.

**Guideline 4.4.** Utilize shallow grass-lined channels to convey and store runoff.

**Guideline 4.5.** As an option, incorporate rooftop gardens which partially or completely cover a roof with vegetation and soil or a growing medium, planted over a waterproofing membrane. It is recognized that rooftop gardens will not be feasible in every proposed LID project.

**Guideline 4.6.** Use rain barrels and cisterns of various sizes that store runoff conveyed through building downspouts, for future use for landscape watering. Rain barrels or cisterns shall be utilized on greater than fifty percent (50%) of the overall number of downspouts within the project. Rain barrels are generally smaller structures, located above ground. Cisterns are larger, often buried underground, and may be connected to the building's plumbing or irrigation system. The areas of the site or lots where rain barrels and cisterns shall be utilized shall be indicated on the conceptual plans. At the time of permit application for individual structures, the locations shall be specifically indicated on the required plot plan.

**Guideline 4.7.** Evaluate soils on the site post-grading, and if necessary, amend in areas of proposed planting by adding minerals, pea gravel and organic materials to increase its capacity to properly drain, while still being able to absorb moisture and sustain vegetation. The commitment to evaluate the soils shall be placed on the preliminary site plan / subdivisions plat and the soil evaluation information shall be provided to the staff prior to, or during submission of construction plans. It is recommended that amended soils be re-tested annually and re-amended as necessary.



**Guideline 4.8.** Utilize tree box filters placed below grade, covered with a grate, filled with filter media and planted with a tree, to act both as a water retention tank and a natural filter.

**Guideline 4.9.** Utilize numerous and smaller detention and retention areas dispersed throughout the site, in lieu of larger detention and retention areas, in order to encourage a balance of infiltration and evapotranspiration throughout the site.

### 9.11.9 Tree Protection Guidelines

The clustering of existing trees and native vegetation should be incorporated into all LID site and building designs in order to protect natural and environmentally sensitive areas, open spaces, trees vegetation, natural terrain and drainage. Retained trees shall be credited towards the minimum landscaping and buffering requirements specified in Article 11. All retained trees that are proposed to be credited toward meeting the minimum requirements of Article 11 shall be clearly identified by species and size on the proposed site plans. Individual trees located within areas that are not proposed to be credited toward meeting the requirements of Article 11 are not required to be identified by species and size.

Clearing of trees on the site shall be the minimum necessary to support construction of the streets and infrastructure, and the driveways and building pads for each structure. The areas of tree removal shall be clearly indicated on the overall site plan for the development, and on subsequent site plans submitted for individual permits.

Removed trees exceeding ten (10) inches diameter at breast height (dbh) shall be replaced at a rate of one-half inch for each inch removed, within the overall project boundary, provided that such replacement practice meets acceptable horticultural and forestry standards. To the greatest extent possible, replacement trees shall be native trees, as illustrated in Table 9.11.11. Alternate species may be substituted upon the approval of the Administrator, provided that evidence is submitted as to their appropriateness. Areas where replacement trees are proposed shall be clearly indicated on the project site plan and on subsequent site plans submitted for individual permits. In lieu of conducting an inventory of individual trees to be removed at the initial site plan stage, the inventory may be conducted during the construction plan stage.

In order to provide maximum design flexibility in subdivision development, replacement trees may be transferred to a different parcel (or proposed parcel) from where trees were removed, provided they are planted within the overall project boundary.

### 9.11.10 Recommended Plants

LID projects have a potentially wide range of growing conditions throughout a site, including rain garden areas which alternate between wet and dry, detention and retention pond areas which will have predominately moist soils and individual building sites, which are generally well-drained. Soil types may also vary greatly within a project boundary. As a result, a wide variety of plants can be considered for LID projects based

upon the above factors.

Suggested plants for LID projects are illustrated in Table 9.11.11. Many of these plants are native to the region and most are available at local nurseries. Other species may be substituted upon approval of the Administrator, provided that evidence is submitted as to their appropriateness.

The specific plant species selected should be suited to the specific environment. For example, drought tolerant plants should be selected for rain garden areas, and plants that tolerate extended periods of flooding should be selected for detention areas.

The type and placement of plants shall also be consistent with the "The Division of Water Quality 2007 Stormwater Best Management Practices Manual" (NCDENR Stormwater BMP Manual), as amended.

**Table 9.11.10**
**Trees**

| | |
|---|---|
| American Holly – *Ilex opaca* | Persimmon – *Diospyros virginiana L.* |
| Blackjack Oak – *Quercus marilandica* | Post Oak – *Quercus stellata* |
| Black Cherry – *Prunus serotina* | Red Cedar – *Juniperus virginiana* |
| Blackgum – *Nyssa sylvatica Marsh* | Red Maple – *Acer rubrum* |
| Black Walnut – *Juglans nigra* | River Birch – *Betula nigra* |
| Black Willow – *Salix Nigra* | Sassafras – *Sassafras albidum* |
| Butternut Hickory – *Carya cordiformis* | Shumard Oak – *Quercus shumardii* |
| Button Bush – *Cephalanthus occidentialis* | Silky Dogwood – *Cornus amomum* |
| Dogwood– *Cornus* | Southern Red Oak – *Quercus falcate* |
| Flowering Dogwood – *Cornus Florida* | Sugarberry – *Celtis laevigata Willd.* |
| Green Ash – *Fraxinus pennsylvacnica* | Swamp Chestnut Oak – *Quercus michauxii* |
| Holly – *Ilex spp.* | Swamp Cottonwood – *Populus heterophylla* |
| Hop Tree – *Ptelea trifoliate* | Swamp Tupelo – *Nyssa biflora Walt* |
| Ironwood or American Hornbeam – *Carpinus caroliniana* | Sweet Gum – *Liquidamabar styracifulua* |
| Laurel Oak – *Quercus laurilfolia* | Sycamore- *Platanus occidentalis* |
| Mulberry – *Morus rubra* | Tulip Tree – *Liriodendron tulipifera* |
| Overcup Oak– *Quercus lyrata* | Water Oak – *Quercus nigra* |
| | White Oak – *Quercus alba* |
| | Willow Oak – *Quercus phellos* |
| | Winged Elm – *Ulmus alata* |

## Small Trees and Shrubs

Alder– *Alnus serrulata*
American Snowbell – *Styrax grandifolius*
Arrowood – *Viburnum dentatum*
Beautyberry Bush – *Callicarpa Americana*
Blackberry – *Rubus spp.*
Button Bush – *Cephalanthus occidentalis*
Carolina Willow – *Salix caroliniana*
Chokeberry – *Aronia arbutifolia*
Deciduous Holly or Possumhaw– *Ilex dedicua*
Doghobble or Fetterbush – *Leucothoe racemosa*
Eastern Sweet Shrub – *Calycanthus floridus*
Elderberry – *Sambucus canadensis*
Groundsel– *Baccharias halimifolia*
Inkberry – *Ilex glabra*
Pawpaw - *Asimina triloba*
Pinxterflower or Wild Azalea – *Rhododendron periclymenoides*
Red Buckeye – *Aesculus pavia*
Red Chokeberry – *Aronia arbutifola / photiania pyrifolia*
Silky Dogwood– *Cornus amomuma*
Spicebush – *Lindera benzoin*
Tag Alder – *Alnus serrulata*
Umbrella Tree – *Magnolia tripetala*
Virginia Creeper – *Parthenociissus quinquefolia*
Virginia Sweet Spice – *Itea virginicus*
Virginia Willow or Sweetspire – *Itea virginica*
Water Ash – *Fraximus caroliniana*
Wax Myrtle – *Myrica cerifera*
Winterberry – *Ilex verticillata*
Witch Hazel – *Hamamelis virginiana*

## Herbaceous Plants

Alumroot – *Heuchera americana*
American Three-Square – *Scirpus americanus*
Annual Rye– *Lolium annua*
Aromatic Thoroughwort – *Eupatorium hyssopifolium*
Arrow Arum- *Peltandra virginica*
Arrowhead– *Sagittaria latifolia atamasco*
Aster – *Aster pilosus*
Atamasco Lily - *Zephyranthes*
Beaked Panicum – *Panicum anceps Panicum clandestimum*
Big Bluestem – *Andropogon gerardii*
Bladder Sedge – *Carex intumexcens*
Black Eyed Susan or Orange Coneflower – *Rudbeckia fulgida*
Blue-Eyed Grass – *Sisyrinchium mucronatum var. mucronatum*
Blue Flag– *Iris virginica*
Jewelweed – *Impatiens capensis*
Joe Pye Weed– *Eupcetomum fistulosum*
Lance-Leaved Tickseed – *Coreopsis lanceolata*
Lizards Tail– *Saurus cernuus*
Little Bluestem – *Schizachyrium scoparium*
Little Joe – *Eupatorium dubium*
Little Sweet Betsy – *Trillium cuneatum*
Lizard's Tail – *Saururus cernuus*
Lobelia – *Lobelia puberula*
Lyre-Leaved Sage – *Salvia lyrata*
Lurid Sedge – *Carex lurida*
Marsh Mallow or Swamp Rose Mallow – *Hibiscus moscheutos*
Marsh Marigold– *Bidens spp.*
May-Apple – *Podophyllum peltatum*
Meadow-Beauty – *Rhexia mariana*
Meadow Violet – *Viola papilloinacea*
Narrowleaf Mountainmint – *Pycnanthemum*

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| Blue Star – *Amsonia tabernaemontana var. salicifolia, Blue Star*<br>Bluets – *Houstonia caerulea*<br>Boneset– *Eupatorium perfoliatum*<br>Bottle Brush Sedge – *Carex comosa*<br>Brompus sp.<br>Brushy Broomsedge- *Andropogon glomeratus*<br>Bulrush – *Scirpus atrovirens*<br>Cardinal Flower – *Lobelia cardinalis*<br>Canada Lily – *Lilium canadense ssp. editorium*<br>Carolina Crane's Bill – *Geranium carolinianum*<br>Common Arrowhead or Duck Potato – *Sagittaria latifolia*<br>Coreopsis spp. – *Coreopsis*<br>Daisy Fleabane – *Erigeron strigosus*<br>Dog Fennel – *Eupatorium capillaries*<br>Dwarf St. John's Wort – *Hypericum mutilum*<br>Dwarf Spike-Rush – *Eleocharis parvula*<br>Eustis Lake Beardtongue – *Penstemon austrailis*<br>Forget-Me-Not – *Myostosis verna*<br>Foxtail Grass – *Setaria geniculata*<br>Fringed Sedge – *Carex crinita*<br>Foxtail Grass – *Setaria spp.*<br>Gamma Grass – *Tripsacum dactyloides*<br>Goldenrod – *Solidago altissima*<br>Green Arrow Arum – *Peltandra virginica*<br>Grassleaf Rush – *Juncus biflorus*<br>Hibiscus– *Hibiscus moscheutos*<br>Hop Sedge – *Carex lupulina*<br>Ironweed – *Vernonia noveboracensis*<br>Indian Grass – *Sorghastrum nutans*<br>Jack-In-the-Pulpit – *Arisaema tryphyllum* | *etnuifolium*<br>New York Aster – *Aster novi-belgii (L.) Nesom*<br>Obovate Barbara's Buttons – *Marshallia obovata var. obovata*<br>Panic Grass – *Panicum scoparium Panicum stipitatum*<br>Passionflower – *Passiflora incarnate*<br>Pickerel Rush or Pickerelweed – *Pontederia cordata*<br>Plume grass – *Erianthus contortus*<br>Royal Fern – *Osmunda regalis*<br>Rush – *Junus effuse*<br>Scarlett Swamp Hibiscus – *Hibiscus coccieneus*<br>Sedge – *Carex spp.*<br>Skullcap – *Scutellaria intefrifolia var. eintegrifolia*<br>Soft or Common Rush – *Juncus effusus*<br>Soft Stem Bulrush – *Scirpus validus*<br>Spring Beauty – *Claytonia virginica*<br>Spiderwort – *Tradesscantia ohensis*<br>Spotted St. John's Wort – *Hypericum punctatum*<br>Spring Ladies' Tresses – *Spiranthes vernalis*<br>St. John's Wort – *Hypericum spp*<br>Sundrop*s* – *Oenothera fruticosa and perennis*<br>Swamp Milkweed– *Asclepias incarnate*<br>Sweet Flag or Calamus – *Acorus calamus*<br>Switch Grass– *Panicum virgatum*<br>Turtleheads – *Chelone glabra*<br>White-Top Sedge – *Dichromena colorata*<br>White Turtlehead – *Chelone glabra*<br>Wild Rose – *Rosa carolina*<br>Wild Rye Grass – *Elymus virginicus*<br>Venus' Looking-Glass – *Speculiaria biflora* |

### 9.11.11 Invasive Exotic Plants

The following plants are not recommended for use within LID projects. These are plants that reproduce exponentially, compete with native species for resources and threaten the biodiversity of the ecosystem.

<u>Vines</u>
Chinese Wisteria *(Wisteria sinensis)*
English Ivy *(Hedra helix)*
Japanese Honeysuckle *(Lonicera japonica)*
Japanese Wysteria *(Wisteria floribunda)*

Kudzu *(Pueraira montana)*
Periwinkle *(Vinca spp.)*
Porcelain Berry *(Ampelopsis brevipedunculata)*

Grasses
Bamboo *(Bambusa spp.)*
Running Bamboo *(Phyllostachys spp.)*

Shrubs
Autumn Olive, Silverberry *(Elaegnus spp.)*
Honeysuckle – Fragrant, Amur, Morrow's, Standish's, Tartarian, Dwarf *(Lonicera fragrantissima, maackii, morrowii, standishii tatarica, xylosteum)*
Multiflora Rose *(Rosa multiflora)*
Nandina, Sacred Bamboo *(Nandina domestica)*
Privet, Chinese and Japanese *(Ligustrum spp.)*
Rose of Sharon *(Hibiscus syriacus)*

Trees
Empress/Princess Tree *(Paulownia tomentosa)*
Mimosa *(Albizia julibrissin)*

# 9.12 Residential County Originated (R-CO) District

### 9.12.1 Purpose

The R-CO District is established in order to assign zoning to residential subdivisions that are annexed into the City, which do not meet the minimum lot standards of the other City residential zoning districts. The R-CO district is established to allow the flexibility in lot dimensions, where there are no alternatives using City of Concord zoning districts that would allow the dimensions of the lots located in the said development. This zoning district will allow developments such as these to transition from Cabarrus County zoning to City of Concord zoning and avoid non-conforming lots. The City intends only to apply this zoning to recently annexed subdivisions and does not intend to accept applications to rezone any property to R-CO.

### 9.12.2 Dimensional Requirements

The dimensional requirements for each particular R-CO district shall be determined by the recorded final plat. In the event that the plat does not specify minimum dimensional requirements, the properties shall comply with the requirements specified in Tables 7.6.2 A and 7.6.2 B.

### 9.12.3 Permitted Uses

Uses permitted in each particular R-CO district shall be governed by the recorded final plat, as applicable. In the event that the recorded final plat does not specify permitted uses, the permitted uses shall be those allowed by the Cabarrus County Zoning Ordinance in effect at the time of annexation into the City of Concord and/or as listed in the City of Concord ordinance of zoning map amendment adopted by the City pursuant to N.C. Gen. Stat. 160A-364 through 160A-366 and 160A-81 through 160A-392 and any subsequent zoning map amendments.