
**SECTION 6.
DESIGN GUIDELINES**

MASTER PLAN 2004

TOWN OF COPPER CANYON, TEXAS

SECTION 6. DESIGN GUIDELINES

Introduction

The rural character of Copper Canyon could be described in several ways. Principally, it is a community of large-acreage residential lots where housing and the built environment takes a back seat to the natural environment. This natural environment may be described as one with scenic open views of gently rolling pasture land interrupted only by mature tree stands, open fencing, periodic ranching and farming structures, and homes (generally constructed of brick or natural stone) set far back from the roads. Roads are, by definition, two-lane rural roads and tree-lined in many areas. Such an environment has proved very accommodating to a rural, country lifestyle where residents enjoy horseback riding and other activities associated with a quiet and peaceful rural community.

Purpose and Application

It is the purpose of design guidelines, in general, to provide a detailed framework for which development occurs and contributes to the ultimate vision of the Town as desired by its citizenry. As such, it is the ambition of the Town to preserve and enhance the rural community just described by establishing design guidelines and other tools that accompany a Master Plan.

Design guidelines, as established here, should be adopted into the zoning or subdivision ordinance, as appropriate, or into the planned development categories (PD1 and PD2) proposed in the Master Plan. Adoption moves “guidelines” into a legal framework that gives assurance that development *must* occur in the manner prescribed.

6.1 Residential, General Design Guidelines

Note: This section serves as a base to the guidelines described in the individual land use categories. Where any conflicting guidelines occur, the guidelines described for the individual land use categories will take precedence. Some guidelines that do not appear here are purposely omitted because the language in the existing zoning or subdivision ordinance addresses the concern. For example, setbacks and lot orientation for all residential categories (except PD 2, allowing town housing) are already appropriately described in the zoning ordinance.

Issue:

Residential development in many communities often occurs in a manner that is repetitive and monotonous as it seeks to develop land via economies of scale in building materials and design. The end result is an aesthetically dull and unremarkable environment with no sense of place or character.

Solution:

To avoid this chance for monotony, no same building elevation should exist within a twelve hundred foot (1200') radius of another structure. Such a measure ensures a healthy level of design variety within a residential development.

Issue:

Tall fencing with no openings can create a “barricading” effect in a community and take away from the scenic and open views within the community. Fencing also plays a significant role in the aesthetics of the built environment; low quality fencing with inappropriate materials can be seriously detrimental to the aesthetic goals of the community.

Solution:

Fencing should be a maximum height of six feet (6') and constructed of masonry, wood, wrought iron, barbed wire, pipe rail or planting materials. Whatever material selected, compatibility with the main structure should be the guiding principal in fence design. Along the frontage road, the fence should be substantially set back from the street and be sufficiently open (opaque fences should not be allowed) to allow views of natural areas. Developments desiring particularly high-design fencing may apply for a Special Use Permit.

Note: Properties fencing farm animals with the exterior fence only should ensure materials and construction provide safe containment.



“Live” wall fencing at appropriate height



Masonry fencing at appropriate height



Open fencing (wood and metal shown here) allows open views



Pipe fencing

Issue:

Development often occurs in a manner that forgets the pedestrian and champions the auto. For Copper Canyon, such an environment would not allow one to walk or ride horseback to the existing hike and equestrian trails, creating additional and unnecessary auto trips and would inconvenience to the user.

Solution:

Residential developments should include new hike/equestrian trails to run either along the roadway or in an open space area to the rear of newly constructed homes that will provide user access or “connectivity” to the existing trail system. Trail connection would not be required in the PD2 category if town housing were developed because of its proposed location and requirements for sidewalks. See Section 7. *Open Space and Trails Plan* for specifics on trail construction.



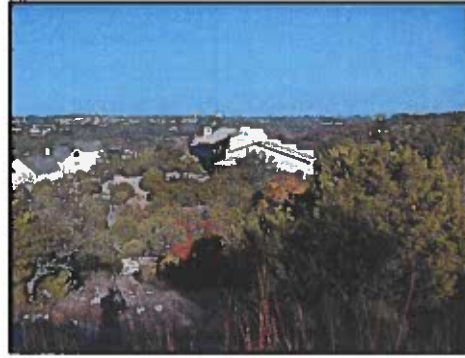
Trails provide connection by hike/equestrian to open space, parks and other trail systems and reduce car trips to these destinations

Issue:

An enhanced scenic view can be gained by positioning homes to face open space areas rather than the roadway. In such a setting, one's view is not compromised by glare from the road and auto travel but looks out on to a more natural area with views of the front facades of homes in the distance.

Solution:

For the Low Density Category, homes should be positioned toward open space areas and developers should be encouraged to take part in open space "set-asides" of developing parcels. A similar effect can be had for town home development by having homes open up to a neighborhood park. In such a situation, homes could open directly on to the park with rear entry garages to the street or be simply across the street from the park but facing it. Residential Estate and Semi-Rural Categories would not be required to participate in this development pattern.



This home faces an open view, rather than a road, and is secondary to the natural environment

Issue:

Garage doors facing the public street take away from neighborhood appeal and visual interest.

Solution:

Garages, when constructed, must be recessed from the main structure or feature a side-entry at the rear of the home. Alleys will not be allowed in any category except PD 2.



Front-entry garages take away from the street view



Home featuring a recessed garage not visible from the street. This home addresses all architectural concerns

Issue:

More intense land uses directly abutting lesser ones can be conflicting and negatively impact the more rural setting of the lesser-intense development.

Solution:

A buffer zone of twenty five feet (25') is required of the more intense development when abutting a lesser one. This buffer zone will be landscaped using a berm, living fence or 100% planted screen. Refer to Section 6.8 *Landscaping* for specifics.



An appropriate buffer zone for separating differing land uses.

6.2 Residential, Architectural Controls

Issue:

Architecture that is in direct conflict with the rural character of the Town is not desirable.

Solution:

Colors, proportions, scale and materials should compliment the rural character of Copper Canyon. Building materials should be of a natural color and high quality. Materials for exterior walls that should not be allowed include stucco, tin, metal (or metal in appearance) or any industrial-like materials.

Issue:

Architectural styles not consistent with the community may seriously compromise the “look and feel” of the Town.

Solution:

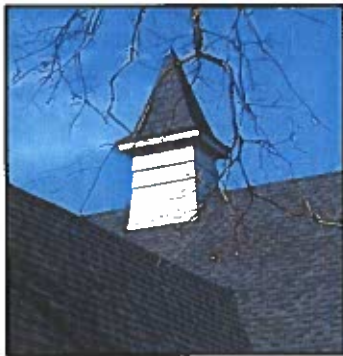
Residential architecture should be consistent with the architectural theme of the area. For Copper Canyon, the area will pertain to the zoning category and location of the home.

Issue:

Architecture that is plain in appearance should be avoided.

Solution:

1. Two of the following design features should be used: dormers, gables, cupolas and pillars or posts.



Cupola



Dormer



Gable

2. Steep roof pitches should be used; a minimum rise: run ratio of 8:12 is appropriate.



**Steep roof pitch and a natural
stone exterior address
architectural guidelines**

Issue:

Secondary structures can contribute to or detract from the architectural consistency of the Town.

Solution:

Secondary structures should be constructed of like-materials to the main building. This includes garages and mailboxes but does not include structures built for ranching or farming purposes.

Issue:

Unattractive structures used for storage, ranching or farming purposes pose a negative impact on the physical appearance of the community.

Solution:

Structures typically thought of as storage sheds (to be defined as a structure whose primary purpose is for storage and is less than 150' square feet with roughly a 12' x 12' base) may not be in view from the street and must be screened by either a main or secondary structure (ex. garage).

Exceptions: sheds whose exterior walls are constructed of like materials to the main structure or of wood or wood-like materials (ex. Smart Panel, Hardi Plank) would not require screening.

All structures for agricultural or ranching purposes and featuring metal exterior walls and/or roofing must be painted or finished and may not be of galvanized metal. Structures are not required to be screened but must be set back a minimum one hundred fifty feet (150') from the front lot line.

Structures constructed of masonry or wood/wood-like materials will not require a special set back requirement. No other exposed material than those just discussed will be allowed.

Issue:

A sense of neighborhood is lost in many newly constructed residential developments.

Solution:

Primary entries must front to the public street (or open space where applicable). Front porches should be encouraged for interaction among neighborhood families and contribute to the safety of the neighborhood by providing “eyes on the street”.

**Example of home appropriate to Low Density or Semi-Rural Category:**

1. side-entry or “J Drive” garage
2. mailbox construction matching main structure
3. front porch and dormers featured
4. masonry construction

6.3 Residential, Category-Specific Design Guidelines

In an effort to maximize a continuous character for the built environment throughout the Town, the same design guidelines will apply throughout all residential categories. Increased setbacks are the most critical measure in enhancing the natural setting as densities decrease in the residential zoning categories. Because of the different nature of Planned Development 1, allowing for town housing, the specifics of this category are discussed below.

Town Housing (as part of Planned Development 2)

Note: PD 2 allows for town housing development but will also allow other residential development types to occur so long as they subscribe to one of the residential zoning categories provided for by the Town. PD 2 will also allow for office and retail development as prescribed by the Town Center and Retail/Office Category (PD 1).

Objective:

To create a development area that accomplishes two distinct goals. The first of which is to provide for an area of affordable housing by allowing residential units to be constructed on lots substantially smaller than those required of the other categories. Secondly, given the high density of such a development, high design standards must be employed to ensure an environment pleasing to live in and visit. Such design standards not only refer to architectural controls and their contribution to the overall character of the Town but to the creation of an area that fosters a pedestrian friendly environment.

Measures:

- “Attached” and “detached” town housing is allowed.
- Structures detached should maintain ten foot (10’) side yard setbacks.
- Backyard or side yard patios are encouraged between main structure and garage.
- Front-entry garages should not be allowed to avoid interruptions along the sidewalk and an uninteresting view.



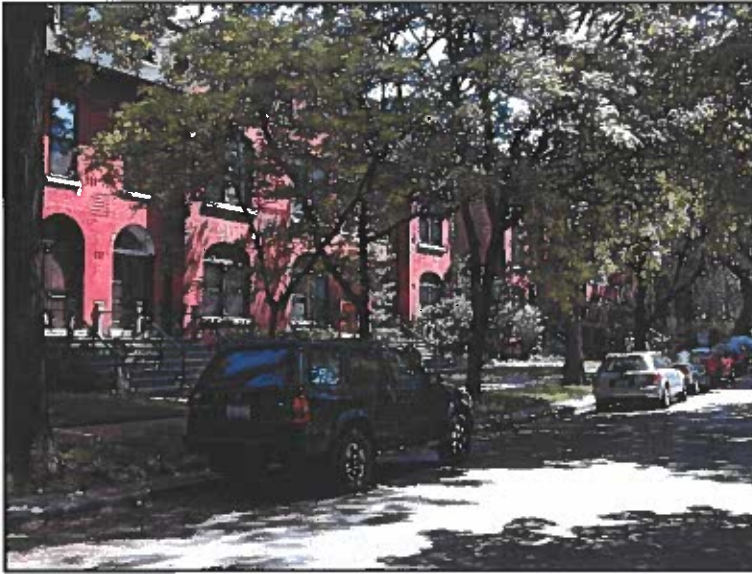
Front-entry garages lining the street

- Maximum 2-story, thirty five feet (35’) height allowed.
- Minimum lot sizes for detached structures are 3,000 square feet (ex. 30’x 100’).
- Small front yards are encouraged with a minimum setback of twenty feet (20’).

- Setbacks along the street should be consistent to avoid a “gap-tooth” effect (see visual in Part 3.3 under Town Center description).
- Off –street parking will not be allowed with the exception of garages.
- Architectural controls applied to other residential categories will be applied to town housing development when applicable.
- Pedestrian accessibility to adjacent commercial development should not be hindered in any way in order to reduce auto trips, congestion and parking requirements (see “Ideal street corner/intersection” in Part 3.3 under “Town Center, Streetscapes” for how the two uses should interface).
- Town housing should be developed in a manner that is seamless with Town Center development and employ the same design features wherever possible (ex. same streetscape themes and materials). *Refer to design guidelines for the Town Center Category (PD 2) under Part 3.2 Non-Residential, Category-Specific Design Guidelines.*
- Streets (and blocks) should be constructed in a grid pattern if and when the land use of a development exceeds two acres.
- Block lengths should not exceed five hundred feet (500’) to encourage cross-through access to areas within or adjacent to the development.
- If streets are constructed, they should be constructed in a similar pattern to the Town Center (refer to the Thoroughfare Plan for proposed curb and gutter street sections), connect with existing streets, or stub-out for future connection with the Town Center.
- Fencing in the front yard should be discouraged to create a more open, neighborhood feel
- Streetscapes similar to that described for the Town Center should be encouraged with sidewalks reduced to a minimum five feet (5’).



1. **brick patterned sidewalk increases aesthetics**
2. **landscaping buffers building foundation, provides street trees and grass separation from street**



An ideal town housing development:

1. structure is 2 story, roughly 35' in height
2. grass and street trees separate sidewalk from auto traffic and provide shade
3. residences setback approx. 20' to provide a small front yard
4. architectural detailing/articulation provide visual interest
5. parking is on-street only
6. windows and front-entry areas provide "eyes on the street" for safety

6.4 Non-Residential, General Design Guidelines

Note: This section serves as a base to the guidelines described in the individual land use categories. Where any conflicting guidelines occur, the guidelines described for the individual land use category will take precedence. Some guidelines that do not appear here are purposely omitted because the language in the existing zoning or subdivision ordinance addresses the concern.

Issue:

Non-residential development should be fashioned in a way that has the least impact to the natural setting of Copper Canyon and residential areas.

Solution:

A fifty foot (50') buffer yard with appropriate landscaping (berm, living fence or 100% planted screen) for development abutting residential uses (excluding town home development).

Issue:

Parking lots are generally unattractive and should be concealed to minimize negative effects on the appearance of the community.

Solution:

All off-street parking required to be screened by a three foot (3') "live" or masonry wall. Parking lots should be located to the side or rear of buildings. Whenever possible, parking should never exist between the main building and the main frontage road. The interior parking lot should contain 10% of its total surface area in landscaping through the use of planter islands, particularly at the ends of double rows of parking.



Planter islands



Parking lot is screened by "live" wall

Issue:

Dumpsters/recycle bins do not contribute a positive aesthetic influence on the Town.

Solution:

All dumpsters/recycle bins are required to be screened where any part is visible from street-frontage with a screening wall.

Issue:

Transformers (i.e. utility boxes) do not contribute a positive aesthetic influence on the Town.

Solution:

Transformers should be required to be screened with a masonry wall or 100% planted screen wherever visible from the street frontage. Transformers would be ideally located to the rear of the building.



Utility box is screened from public view

Issue:

Standard lighting poles do not contribute a positive aesthetic influence on the Town and create a level of lighting to make a rural setting appear urban in character

Solution:

Decorative lighting poles are encouraged (with matching signage poles) at a limited height; illumination should be limited to on-site and low level of intensity sufficient for safety.

6.5 Non-Residential, Architectural Controls

Issue:

Non-residential development that is designed with no context and consideration for the existing and surrounding built environment, will, by definition, not contribute positively to the overall aesthetic vision for the community.

Solution:

The architecture of non-residential structures (including their secondary structures) should be designed using, where practical, the design elements used for residential development in Copper Canyon while still creating visual interest and avoiding monotony through repetition.



Non-residential buildings featuring like materials and design to residential areas bring continuity to overall community appearance

Issue:

HVAC (heating, air conditioning) equipment detracts from the aesthetic quality of an area.

Solution:

Structures featuring a flat roof must feature a parapet on all sides visible to the public and must screen HVAC equipment.

Issue:

Non-residential structures featuring “blank street walls” (i.e. not containing windows, architectural interest, difference in building materials, etc.) create a deadening effect on a development’s ability to contribute to a high-quality public environment.

Solution:

Exterior first floor building walls facing the main pedestrian walkways should feature no less than 40% in doors and windows to allow passers-by to see into retail shops for window shopping and general visual interest. These walls should also contain articulation to avoid a long and unchanging wall.



Large windows and openings create visual interest along the streetwall

6.6 Non-Residential, Category-Specific Design Guidelines

Open Space and Trails

Objective:

To maximize, throughout the Town, the amount of land that may be designated as primarily open space through the collection of lands currently dedicated as easements or in the flood plain and land donated by developers, land owners and/or the Town. Expansion and maintenance of the trail system should provide continuity with trail sections of same use and surface as neighboring communities.

Measures:

- Open space should feature no major physical improvements (i.e., structures, park equipment, etc.) except trails and related types of development.
- Open space should be located in a manner to provide long, unobstructed views and relief from development and protect existing, important stands of trees and vegetation.
- Open Space to be linked by existing trail system or new trails.
- Any parking area must be minimal in impact and possibly allow horse trailer parking areas.
- Lighting must be minimal and should be limited to parking and access areas.

- All existing and new trails should ultimately connect to all open space and park areas through an uninterrupted system.
- Nature/Equestrian trails should be a minimum ten feet (10') wide with twelve feet (12') clearance to allow for emergency access and to provide continuity with existing and connecting trails with neighboring communities.
- Trail sections should be based on the requirements of the Corps of Engineers.
- Easement dedications along private property for trail expansion will be encouraged where appropriate.
- All new development (excluding development south of F.M. 407) should be required to provide trail construction and maintenance between property development and street frontage or to the rear of properties, wherever appropriate.

Community Center and Public Facilities

Objective:

A community center, if developed, should be centered at the existing Town Hall at 400 Woodland Drive, as provided for on Plate 4.1 *Future Land Use and Thoroughfare Plan*. It should be developed as the community sees fit to serve as a public meeting area (i.e. civic center) with recreational areas to include such facilities as a swimming pool, tennis courts and/or equestrian center.

Public facilities should be reserved for public utility needs like water and electricity service, but should also be constructed for such public amenities as new schools, fire/police stations and churches.

Measures:

- Architectural controls should be similar to residential development for continuity.
- Buildings should be limited to a maximum two-story, thirty five foot (35') height for low impact to rural character.
- Off-street parking should be located to the rear or side of the main structure.

Town Center (Planned Development 1)

Objective:

In principal, non-residential development is contrary to the vision of Copper Canyon's citizens for a community that is totally rural and residential in character. However, citizens recognize

that non-residential development is the necessary vehicle to secure quality public services to residents through an increased tax base. This non-residential development should occur with the highest standards in place and in a manner that elevates itself from standard commercial development characterized by the strip centers and big box retail that has occurred along some portions of F.M. 407. To do so, a Town Center concept plan should be utilized that makes a positive contribution to the public environment through a pedestrian-friendly environment that champions human-scaled buildings, screens and breaks up large parking areas, offers a central public gathering space and the like.

Measures:

1. Streets and Blocks

- Streets (and blocks) should be constructed in a grid pattern if and when the land use of a development exceeds two acres.
- Block lengths should not exceed five hundred feet (500') to encourage cross-through access to areas within or adjacent to the development.
- If streets are constructed, they should be constructed in a grid pattern (refer to the Thoroughfare Plan for proposed curb and gutter street sections), connect with existing streets, or stub-out for future connection with PD 2.
- Loading/Unloading may occur along street frontage, where commercial service parking will be provided during certain hours.
- Alleys would be appropriate for commercial service and trash pick-up and should be well-lit for safety.
- Large paved areas with loading docks are not appropriate to the overall concept of the Town Center.

2. Parking

- On-street parking should be maximized (to reduce off-street parking requirements) using parallel or diagonal parking on one or both sides, however appropriate.
- Parking lots should be broken up into areas no larger than 10,000 square feet (ex. 100'x100') and no more than 60 spaces to minimize negative visual effect.
- Curb cuts (driveways) should be restricted to one per block side or one every three hundred feet (300') to avoid excessive sidewalk interruptions.
- Parking should be located to the side or rear of buildings; parking should not be allowed in the front yard to avoid interruption with pedestrian traffic and for aesthetic reasons.
- Required minimum parking ratios should be as follows:
 1. Office: 1 space per 450 square feet

2. Retail: 1 space per 300 square feet
 3. Restaurant: 1 space per 150 square feet
 4. Cinema: 1 space per 4.5 seats
- A parking garage may be constructed to replace parking lot area but should appear similar to the main structure and be no taller than the main structure. It should be located toward the interior of the development where possible and not deter pedestrian traffic on the ground.



Parking garage that compliments its main structure, is landscaped, pedestrian-friendly and reduces area needed for parking lots

3. Sidewalks and Public Space

- Sidewalks should be a minimum ten feet (10'); wider widths are encouraged at corners/intersections to allow for public seating areas (ex. outdoor sidewalk café).



Wider sidewalks accommodate outdoor sidewalk cafes

- A central public space should act as the focal point of the Town Center; this public space may be in the form of a public square or plaza, mall (an auto-free, pedestrian street) or park.



This pedestrian mall (auto-prohibited street) increases its visual interest through patterned brick versus regular paving

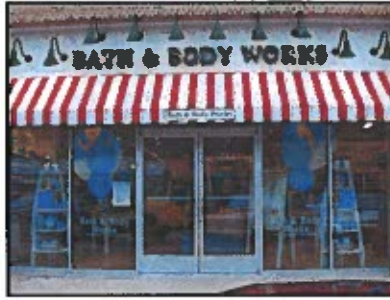
- A central public space should be a minimum size of a ½ acre.
- A central public space should be clearly visible to pedestrians, feature a public sculpture or fountain with seating area at its center to add visual interest and an attraction to bring people to its center.



Central plaza/square offers center attraction (chess), acts as focal point to shopping area and features street furniture (benches, lighting), landscaping, patterned brick

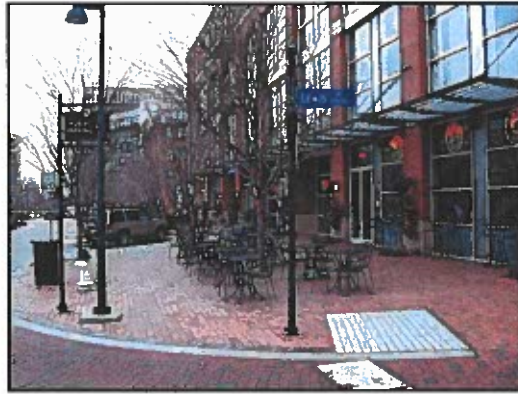
4. Streetscapes

- Awnings and canopies are appropriate to the pedestrian walkway for visual interest and to add shade/weather protection; awnings should not extend beyond the sidewalk or lower than eight feet (8') for walkway clearance.



Canopies provide both visual interest and protection from the elements

- Building arcades are not desirable along the walkway.
- A unified visual image of the Town Center should be enhanced with elements like public sitting areas, rhythm of street trees and lighting and landscaping.
- The pedestrian-oriented environment should be safe, accessible, visually pleasing and comfortable.
- Bollards should be used to separate and protect public space from autos where appropriate.
- Sidewalk elements should not impede persons from reaching cars parked at the curbs, trash receptacles, etc.
- Street trees in appropriately sized tree grates should be located with regular spacing (not to exceed 20') along all sidewalks.
- Street trees should have a ground clearance of eight feet (8') over the sidewalk and fourteen feet (14') over the street.
- Trees should not obstruct building entrances or corner visibility for auto traffic.
- Sidewalks and pedestrian crosswalks are encouraged to be constructed of an alternative to regular paving such as brick, interlocking concrete pavers or colored concrete for added visual interest.
- Pedestrian crosswalks should be a minimum eight feet (8') in width and connected to the sidewalk by ADA ramps.
- Outdoor seating and sidewalk restaurants are desirable to allow for outdoor leisure use, people-watching and an overall more attractive Town Center.
- Streetscape features like trash cans, newspaper racks, benches, bollards, decorative lighting poles, etc. should have a unified theme and be placed at regular intervals throughout the Town Center.



Ideal street corner: features a “pedestrian bulb”: increasing sidewalk area at corner for reduced crosswalk distance, space for outdoor seating, patterned brick and attractive streetscaping

5. Landscaping

- Street trees (along sidewalk) should be restricted to a maximum twenty five feet (25') height at maturity; the type will be to the developer's discretion but trees requiring minimal care are encouraged.
- Street trees at the corners, main entrance or within the central public space may be of medium height at maturity (30'-45').
- Tree grate areas should be a minimum of four feet (4') in width or twenty square feet.
- Landscaping, shrubs and ground cover are encouraged to accent areas, shield any unsightly areas and soften building foundations.
- Flowers and natural grasses are encouraged throughout the Town Center, particularly at the main entrance or street corners.
- Plant containers and potted plants are encouraged throughout the Town Center.

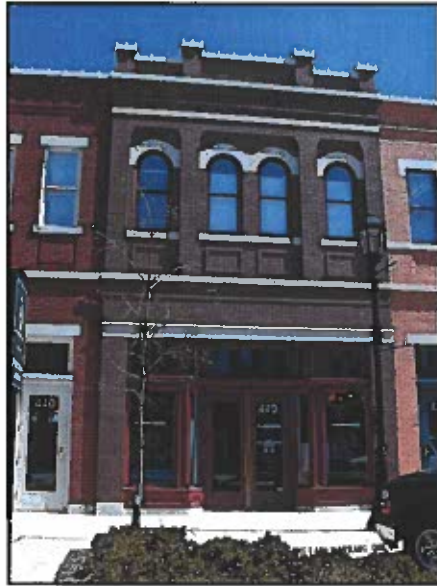
6. Building Setbacks and Envelope

- Buildings should feature a continuous street wall for further support of the pedestrian environment; firewalls are encouraged versus actual building separations.



This attractive streetwall features parapets to shield rooftop HVAC equipment, on-street parking (with additional parking at rear), and sidewalk unbroken by driveways, large windows, awnings and street trees.

- All buildings should be setback a minimum ten feet (10') from the street to allow for sidewalks, setback variance along the street should be discouraged to avoid a “gap-tooth” effect.
- Building footprints (separated by firewall or actual building) will be limited to 10,000 square feet to discourage “big box” formats from retailers.
- Building height is limited to thirty five feet (35'); allowances will be made for architectural detailing that extends beyond the height limit.
- Buildings are limited to two stories in height.



An ideal structure:

1. retail below, office above
2. approximately 35' height
3. approximately 10' sidewalks
4. windows allow viewing in, visual interest
5. continuous street wall (connected with next building)
6. articulation gives interest
7. smaller footprint discourages a "big box" format
8. attached building has same setback, avoiding a "gap-tooth" effect

7. Uses

- Uses will be limited to office and retail.
- Wherever possible, retail should be located on the ground floor and office above.
- Governmental uses should not be allowed to avoid space being taken up for potential tax revenue generating uses.
- Auto-oriented uses or any use that would require off-street auto uses (i.e. gas stations, drive-thru restaurants, etc.) should not be allowed.

8. Monument/Entrance Signage

- A major monument sign, constructed under the requirements of a secondary structure (i.e., like materials), would be appropriate along F.M. 407 to mark the location and entrance to the Town Center (See Section 4.1 *Public Design Elements*).



Example of an appropriate monument entrance sign to Town Center

9. Individual Retail/Office Signage

- Signage should be exterior lit to avoid excessive lighting.
- Signage should be to a human-scale (i.e. not intended to be seen by fast moving auto traffic); it should be limited to two feet (2') in height, ten feet (10') in width, compliment the overall architectural style of the building and not extend beyond the building's height, preferably inset above the main entrance.
- Projecting signs along the first floor level are appropriate.
- Awning signs are appropriate.



Signage should be exterior-lit, human-scaled and preferably mark the main entrance

6.7 Public Design Elements

Objective:

Man-made features within the community whose functionality warrants their existence should be constructed in a manner that adds positively to the appearance of the community through good design.

Measures:

Bridges

- Bridges should be veneered in stone, decorative lighting.
- Bridges should be paved with natural stone or patterned colored concrete.

Culverts

- Endwalls and headwalls for culverts are required and should be veneered in stone.
- Culverts with a height over thirty feet (30') should provide vehicle/pedestrian protection through an added stone wall or guard rail.

Entry Treatments

- A monument wall may be placed in a median at the main entry of a development.
- Entry treatments should be of masonry construction, signage may be incorporated within the wall and must meet signage regulations.
- Landscaping should compliment any monument wall and signage.



Ideal residential entry treatment:

1. natural stone material is used
2. landscaping compliments the sign and wall structure
3. sign is exterior-lit

Lighting and Signage

- Decorative, low impact pole lighting should be used throughout all residential developments (rather than tall street lighting where possible).
- Lighting should be limited to a height of fourteen feet (14').
- Street signage should use the same decorative poles.

Mailboxes

- Mailboxes should be representative style to the architecture of the residence or building.
- Materials appropriate to mailboxes are aluminum, wrought iron, stone, brick and cast stone (wood is not appropriate).

6.8 Landscaping

Objective:

Landscaping is to be used to minimize the negative effects of the built environment in the Town and increase the aesthetic quality and natural environment of the Town.

Measures and Purposes:

Environmental

- Reduce storm water runoff, erosion and assist in purifying the atmosphere

Health, Safety and Welfare Objectives

- Buffer wind and noise
- Filter contaminants
- Provide oxygen
- Mitigate heat gain from the sun

Aesthetics

- Screen undesirable views, soften and enhance architecture, provide spatial enclosure, increase community identity
 - Provide visual interest and a back drop to the built environment
 - Provide simple ornamentation
-



Landscaping materials require minimal maintenance and provide visual interest to an otherwise uninteresting residential street corner

General

- Indigenous trees and plants are encouraged for low maintenance (example: “Xeriscaping”) and continuity with existing vegetation.
- Trees should be grouped together in open spaces to appear similar to natural tree stands.
- Trees should be indigenous to the area.
- Trees should be used to enhance the natural setting, provide visual interest, provide windbreaks and screening.
- Ground covers other than grass are appropriate for variety.
- Landscaping should provide foundation defining and softening; use vines to soften walls and fences.
- Plantings should provide visual interest year-round.
- Landscaping should be done around and along all wetlands and bodies of water to screen, contaminants and increase evapotranspiration and filtration.

Tree Selection

Note: Other trees may be appropriate if recommended and approved by a registered landscape architect or Texas Cooperative Extension Denton County horticultural agent.

The following tree list is recommended:

Large trees:

1. Bald Cypress
2. Bur Oak
3. Cedar Elm
4. Chinese Pistachio
5. Live Oak
6. Pecan
7. Red Oak
8. Shumard Oak
9. Sweetgum
10. Texas Ash
11. Texas Persimmon

Small trees:

1. Bradford Pear
2. Cherry Laurel
3. Crape Myrtle
4. Hawthorne
5. Leyland Cypress
6. Redbud
7. Purple Plum
8. Wax Myrtle
9. Yaupon Holly

Buffering

A practice known as *buffering* is often used for areas of development along zoning category boundaries where more intense uses of land abut lesser intense uses. One example would be a transitional area where an office complex abuts a single family residential area. In such an example, the office complex, because of its intensity of land use, may produce a negative effect on the quality of life (and property values) for those nearby residences. To minimize this negative effect, buffering is required whereby the more intense user of land is required to provide a "buffer yard" between itself and the lesser intense property. This buffer yard contains development standards related to typical requirements for a wall, berm, landscaping materials and/or a combination thereof to be located between the two uses.

For Copper Canyon, the following buffer yard recommendations are given:

Scenario A: A buffer yard should be required where PD 1 abuts any single family residential category

Scenario B: A buffer yard should be required where PD 2 is developed as attached town housing and abuts a single family residential category

Scenario C: A buffer yard should not be required where PD 1 abuts a PD 2 developed as attached town housing

Scenario D: A buffer yard should not be required where PD 2 is developed as single family and abuts another, larger lot single-family residential category

The following buffer yard type should be applied to all circumstances requiring a buffer yard:

1. A buffer yard should be a minimum ten feet (10') in width
2. A minimum width of twenty feet (20') may be used to allow for a 20% reduction in planting density required
3. A six foot (6') minimum height masonry wall should be located at the boundary of the *lesser* intense use unless a berm is used of equal height. A berm should have no more than a 3:1 run:rise ratio.
4. The following planting types/densities should generally apply (per one hundred linear feet):
 - Canopy trees: 3
 - Under-story trees: 6
 - Shrubs: 8

Policy Implication

It is the policy of the Town of Copper Canyon that the design guidelines recommended herein be incorporated for all new development through the adoption of appropriate ordinance language.