

“Everyone has the right to walk from one end of the city to the other in secure and beautiful spaces...and an unhampered view down their street, not full of railings, signs and rubbish.”

– Richard Rogers (1933-)



STREETSCAPES

2012 PARKS, RECREATION, TRAILS & OPEN SPACE
VISIONING MASTER PLAN

6.1 INTRODUCTION

“Cedar Hill’s streetscapes provide the opportunity to reflect the unique identity and natural beauty of our city.”

Streetscapes are one of the most visible components of any city—this is especially true for Cedar Hill. Several major roadways pass through the city—including US-67, which runs from Iowa to Mexico over a distance of 1,560 miles. Considering the high level of traffic passing through our community (more than 50,000 vehicles per day travel along US-67), the appearance of our roadways provides the first impression of Cedar Hill for millions of people each year. Ensuring the appearance of our streetscapes is fitting for a city of premier quality is paramount.

Streetscapes are not only about aesthetics, however. Well-planned and designed streetscapes can encourage the use of alternative transportation, improve quality of life, and spark reinvestment and economic growth. Furthermore, Cedar Hill’s streetscapes provide the opportunity to reflect the unique identity and natural beauty of our city.

Goals

- Create a cohesive connective streetscape system throughout Cedar Hill that sets the city apart from neighboring cities in and around the Metroplex.
- Emphasize the natural character of the city and focus on the preservation of its natural qualities.
- Engage, incentivize, and encourage property owners and private developers to improve their properties concurrent with streetscape improvements.
- Reflect the identity of Cedar Hill through the design of gateways and monumentation.
- Establish guidelines for the use of hardscape and landscape materials that reflect Cedar Hill’s identity and character and make efficient use of energy, water, and general maintenance.

Purpose

This Streetscape Master Plan presents ideas designed to transform Cedar Hill’s roadway system into a more effective, attractive, and cohesive multi-modal transportation system. Public participation, input from City leaders, and the 2008 Comprehensive Plan laid the groundwork for this Streetscape Plan. The streetscape concept, designations, and themes refine and consolidate the three components that make up the planned Transportation System as defined in Cedar Hill’s existing Thoroughfare Plan. The primary purpose of the Streetscape Plan is to enhance the image of Cedar Hill and convey the community’s distinctiveness through a unified plan for the implementation of streetscape improvements.



Pertinent Citizen Input

The focus group meetings, public meetings, and telephone survey provided a significant amount of insight regarding the public's opinion on Cedar Hill's streetscapes. Generally, people feel that Cedar Hill is too auto-dominated. They would like roadway corridors to be more aesthetically pleasing while accommodating bicycles and pedestrians. Enhancing the gateways to the City and improving the appearance of US-67 are also priorities. Sustainability is an important consideration, with native, drought-tolerant, perennial plants preferable to water-intensive seasonal species. The telephone survey included several questions regarding streetscapes and beautification.

- The majority of people (73%) think Cedar Hill should have on-street bike routes on some roadways.
- 85% support the enhancement of gateways into the city.
- While 74% of respondents are satisfied with how streets and intersections are landscaped, 62% think the City should plant more trees and landscaping in those areas.
- While there is some support for trails along roadways, 65% dislike this practice, preferring trails in more scenic areas.



6.2 ASSESSMENT OF EXISTING CONDITIONS

“US-67 has untapped potential to announce and celebrate the City of Cedar Hill.”

New Clark Road (below) includes trees planted in natural patterns that integrate with the character of the Balcones Escarpment. US-67 (bottom) does not effectively convey the identity of Cedar Hill.



There are many beautiful streetscapes already existing in Cedar Hill. Some of these are due to enhancements made by the City or developers—such as median plantings, decorative lighting, and monumentation—and some are results of the beauty of the natural environment through which the roads pass.

Streetscapes in the western portion of Cedar Hill afford views of the rolling hills and rock outcroppings of the Balcones Escarpment. The primary examples are Mansfield Road from where it crosses over Joe Pool Lake and FM-1382 where it follows the foot of the Escarpment along the State Park before rising in a sweeping manner towards US-67. Lake Ridge Parkway also shares many of these same qualities. While these roadways currently have very few man-made improvements, they are pleasant to travel along simply due to their surrounding environment.

Paradoxically, the uniqueness and beauty of Cedar Hill is unknown to the passersby that drives on US-67, the main northeast to southwest thoroughfare through the City. This freeway has a “sameness” to it from its intersection with IH-35E to Midlothian and beyond. There are few aesthetic enhancements along the freeway. Instead, there is a considerable amount of visual clutter resulting from billboards, signs, and overhead utilities. In addition, there are few cues to indicate that one is entering or leaving Cedar Hill other than the standard highway city limit sign. This road has untapped potential to announce and celebrate the City of Cedar Hill.

Some roadways have streetscape enhancements in place (typically special pavement patterns, landscaping, and minor monumentation). However, of those that do, there is not a consistency in their design. Overall, the majority of roadways within the City do not have streetscape enhancements that reflect the distinctiveness of Cedar Hill.





The images to the left depict two of Cedar Hill's arterial roadways. Parkerville Road, on the far left, has minimal landscaping and the sidewalk is against the road. In contrast, Pleasant Run Road has a more varied and detailed landscape and the sidewalk is buffered from the road, which provides a higher level of pedestrian comfort. Neither roadway provides dedicated lanes for bicycles.



Some of Cedar Hill's most beautiful streetscapes owe their beauty to the surrounding natural and rural environments as depicted by the image to the left (Duncanville Road) and the two images below (FM-1382)



6.3 Principles

STREETSCAPE

CONCEPT

*Cedar Hill's
streetscape
concept follows the
principles of:*

*context
sensitivity*

complete streets

*green
infrastructure*

The streetscape concept is based on a set of principles that guide the establishment and location of typologies. These principles are:

- **Context Sensitive Solutions** – The practice of designing streets that embrace rather than detract from the character of the surrounding and adjacent areas. Often, this results in changes to road configurations, design speeds, landscaping, and traffic calming. Specific to the streetscape concept, this means that the development and application of each typology is intended to reflect the diverse character of different parts of Cedar Hill.
- **Complete Streets** – An approach that encourages the use of alternative transportation by enhancing the roadway environment for cyclists and pedestrians. Typically, this involves including bike lanes, wide sidewalks, and consideration for visual and physical interaction between adjacent development and the street.
- **Green Infrastructure** – The definition of green infrastructure varies from practices that use natural processes to enhance environmental quality while providing utility services (such as stormwater drainage)¹ to interconnected networks of natural lands, open spaces, and habitat that conserve ecosystem values². Incorporating open space, drainage swales, and trails along roadways will connect and reinforce Cedar Hill's trail system, physically connect the urbanized core of the city with the natural environment of the periphery, and filter stormwater runoff.

Typologies

Considering the principles described above, a streetscape concept with three major “rings” radiating from Cedar Hill's center was developed. The central ring (“Core”) creates a zone of high intensity and focus. The middle ring (“Transition”) establishes a transition between the downtown/urban core and the outer ring. The outer ring (“Greenway”) encircles the city, building upon the unique natural and rural characteristics of Cedar Hill, while also creating green corridors connecting to the city center. A series of streetscape typologies³ support this concept:

- **Freeway (US-67)** – Establish major gateways to Cedar Hill and improves the first impressions of passers-by.
- **Core Arterial** – Encompasses Downtown and Uptown and emphasizes the heart of Cedar Hill and are formal in character.
- **Transition Arterial** – Transitions from the high intensity characteristics of the Core Arterials to the natural quality of the Greenway Arterials.

1 See the US Environmental Protection Agency's “Greening EPA Glossary.”

2 See The Conservation Fund's “What is Green Infrastructure?” webpage.

3 Streetscape typologies relate to the aesthetic nature of roadways and in some cases affect right-of-way width. They do not replace the functional classification of roadways. Any of the “Arterial” streetscape typologies can be applied to both Principal and Minor Arterials.

- Greenway Arterial – Emphasizes and responds to existing natural features where such features exist and introduces native plantings and wide parkways into developed areas.
- Connector Arterial – Provides enhancements across the city while linking other typologies together.
- Collector – Includes moderate improvements for these lower-volume, less-prominent roadways.

The streetscape concept incorporates typical intersection treatments for the different typologies while identifying and defining major gateways and secondary gateways into Cedar Hill and into the City core. Each gateway is an opportunity to highlight the distinctive identity of Cedar Hill and serve as prominent landmarks and focal points within the community.

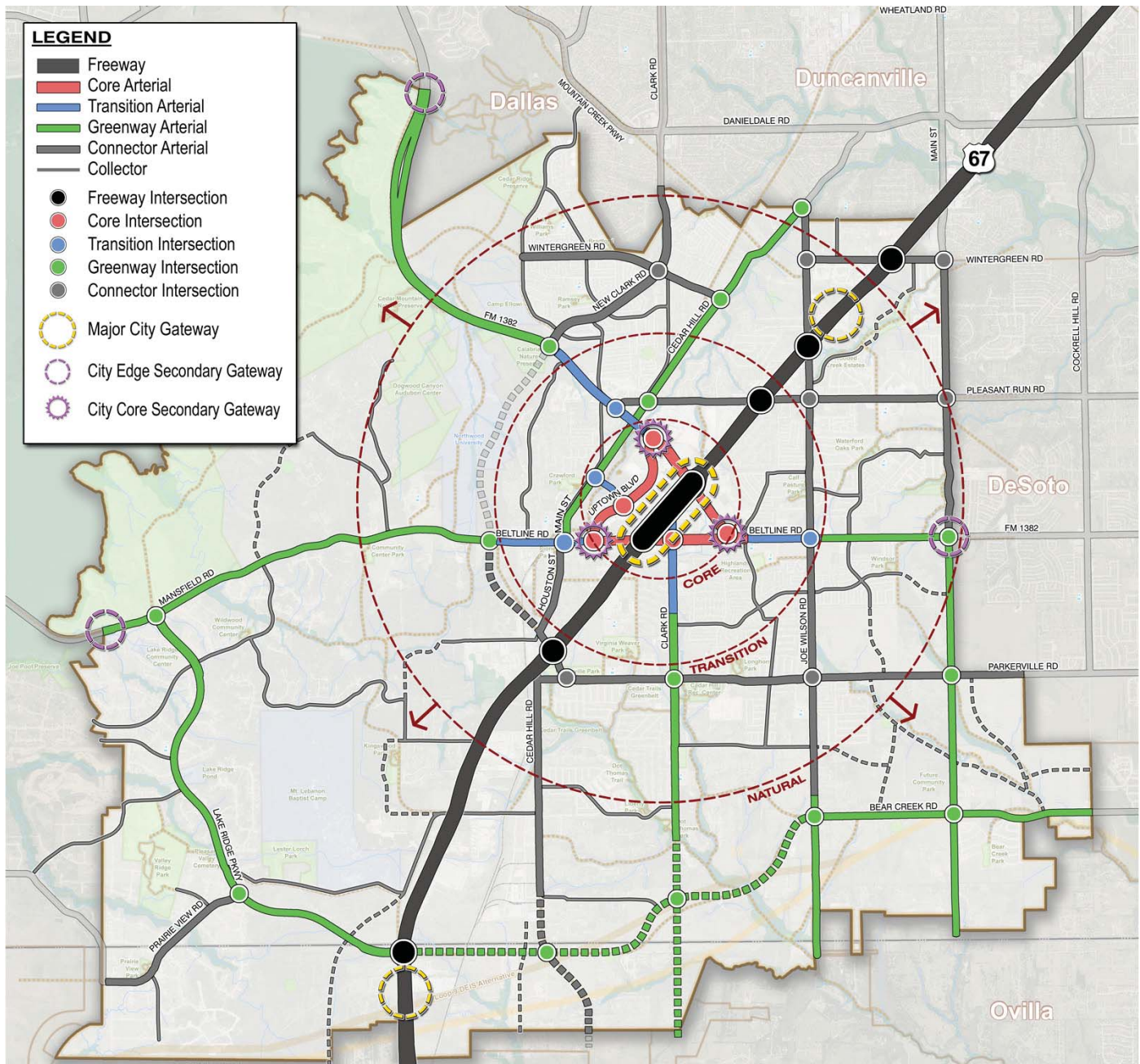


Figure 6.1 – Streetscape Concept Map

This map illustrates the general location of each of the streetscape typologies, major gateways, and intersection treatments.

6.4 FREEWAY

The freeway streetscape typology is applied to US-67 as a means to enhance the aesthetics of the most-traveled corridor through Cedar Hill, thereby improving the first impressions of visitors and passers-by.

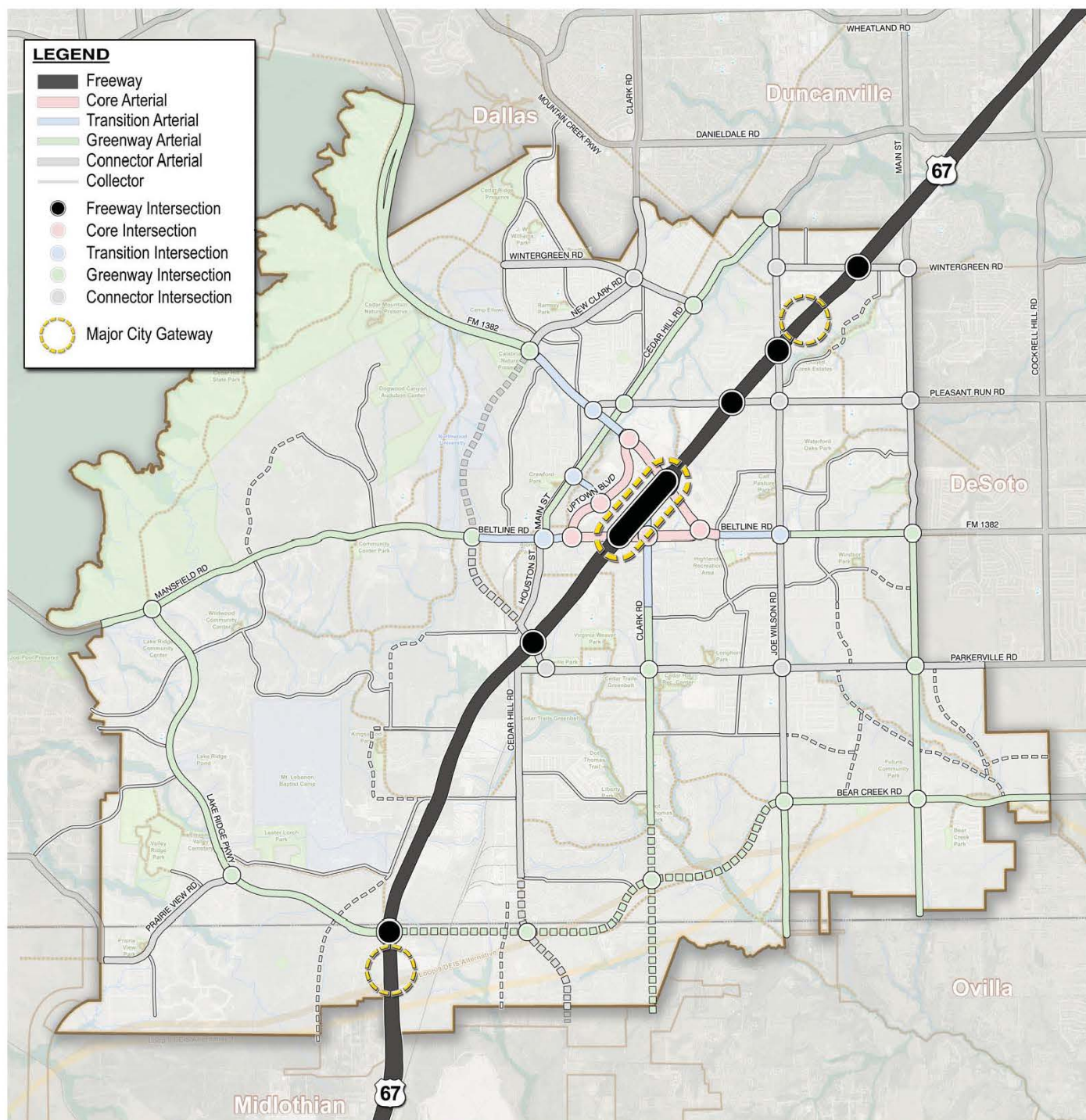


Figure 6.2 – Freeway Typology Map

This map shows the location of the Freeway streetscape typology and its major gateways.

Design Concepts

A number of design principles inform the Freeway typology:

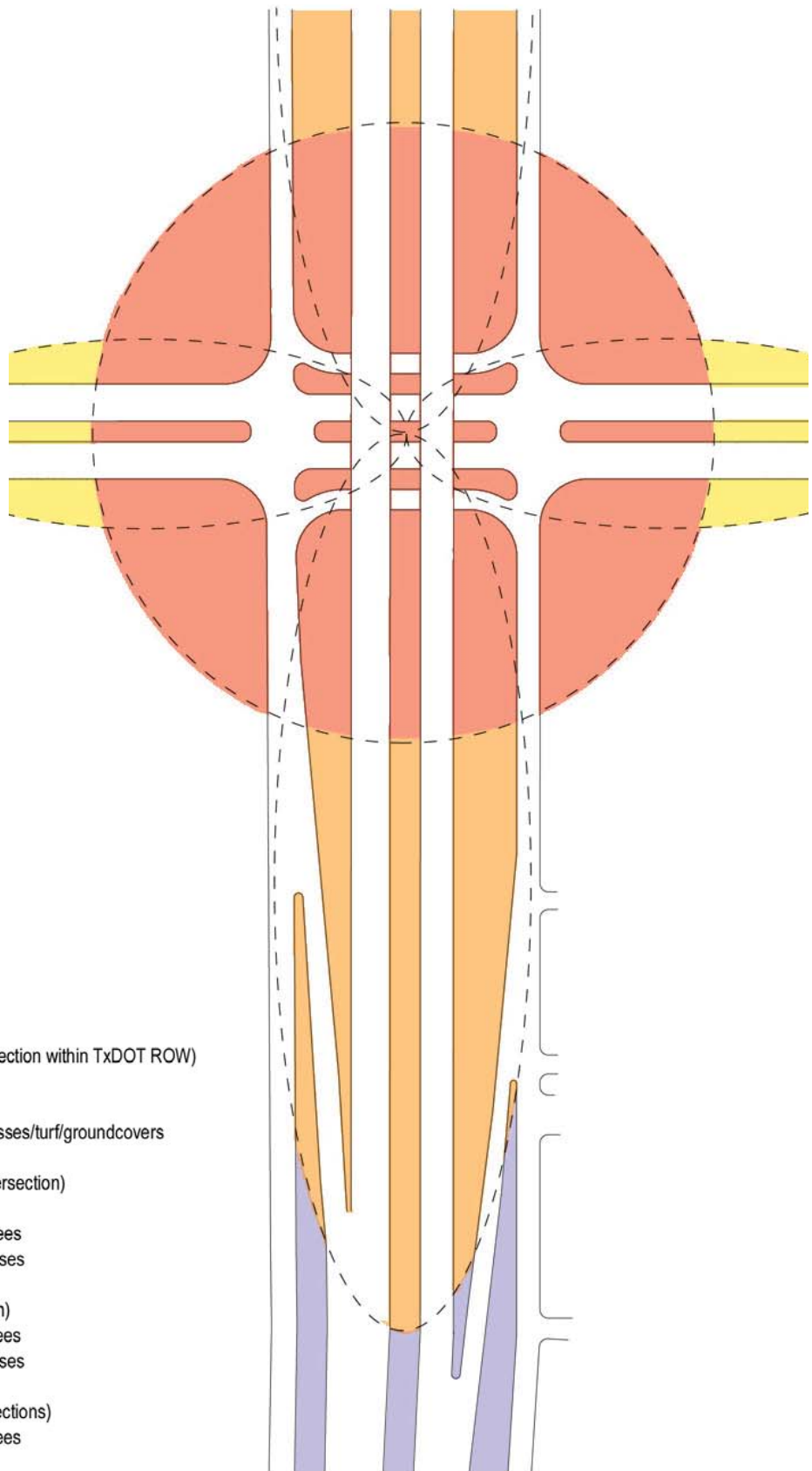
- Respond to the high-speed freeway traffic by applying elongated, large-scale, sweeping forms and simplified plant selection.
- Emphasize the existing topography and introduce physical features—such as retaining walls—to add interest to the landscape. Add walls and berms where the existing topography is relatively flat.
- Create visual interest with varying heights, colors, and textures of plant material. Utilize native species—including wildflowers—as much as possible to reduce water requirements and reflect the natural beauty of the area.
- Create gateways at the edges of the city and at Cedar Hill’s core that reflect the surrounding context:
 - **City Edges** – Reflect the natural and organic nature of the Greenways ring, which encompasses the outer portions of Cedar Hill. In these areas, create organic, naturalistic environments along the freeway by incorporating less detailed and less intense plantings and monumentation. The relatively flat existing landscape at either edge will benefit from the incorporation of berms and monumentation.
 - **Central Core** – Emphasize Cedar Hill’s vibrant core by developing a dramatic gateway that spans the distance between Belt Line Road and FM-1382. The existing embankments along the freeway will be enhanced to emphasize the importance of the area. Because of the higher intensity of the core, forms and materials will be more formal and dense in comparison with the city edges.



Figure 6.3 – Freeway Conceptual Diagram

This diagram shows the various zones along the Freeway typology, centered on a typical gateway intersection (such as Joe Wilson Road, Belt Line Road, FM-1382, or Lake Ridge Parkway). These major intersections are to have monumentation, enhanced pavement (on surface streets), and denser landscaping. Moving away from the intersections, the density and intensity of both landscaping and hardscaping decrease.

Note: A series of five zone designations are used in each of the conceptual diagrams in this chapter. Not every zone designation will apply to each conceptual diagram. While there are minor differences within a zone between diagrams, the intent is that a specific zone designation in one diagram will have similar characteristics in terms of intensity and materials as the same designation in another diagram.



- Zone 1 (approx. 400'-600' from center of intersection within TxDOT ROW)**
 - monumentation
 - major paving enhancements
 - medium to small shrubs/medium to low grasses/turf/groundcovers
- Zone 2 (approx. 1000'-1200' from center of intersection)**
 - monumentation
 - canopy trees/understory trees/evergreen trees
 - large to medium shrubs/tall to medium grasses
- Zone 3 (approx. 800' from center of intersection)**
 - canopy trees/understory trees/evergreen trees
 - large to medium shrubs/tall to medium grasses
- Zone 4 (remaining streetscape between intersections)**
 - canopy trees/understory trees/evergreen trees
 - turf

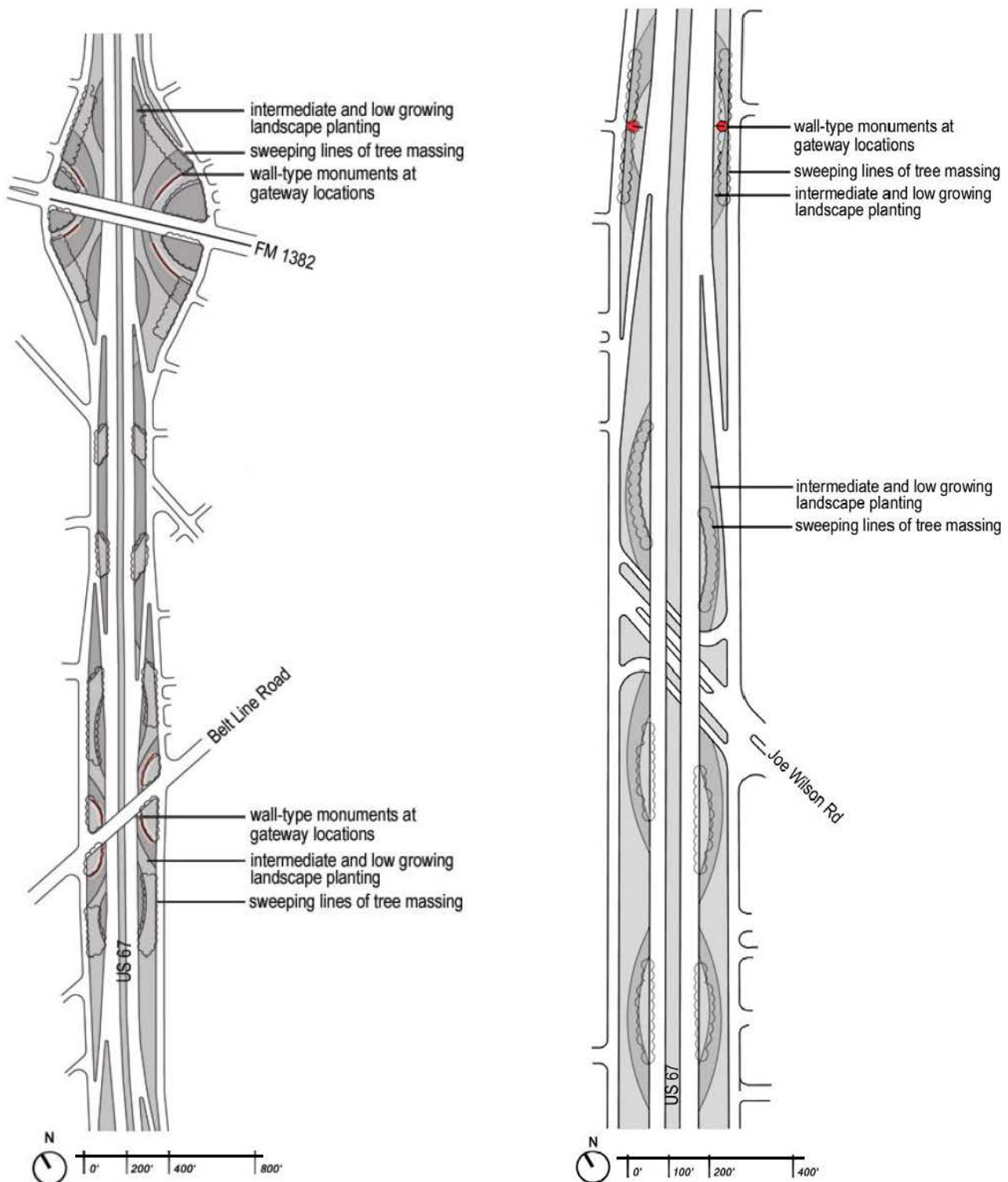


Figure 6.4 – Typical Freeway Streetscape Treatment

These graphics illustrate the intent of the conceptual diagram (Figure 6.3) as applied to two different freeway intersection types (Central Core, left; City Edge, right). The intersection of US-67 and Lake Ridge will be of the City Edge type, similar to the right diagram. The specific design for each freeway intersection will vary. The reference to gateways in these drawings is presented by virtue of their association with the specific intersections illustrated.

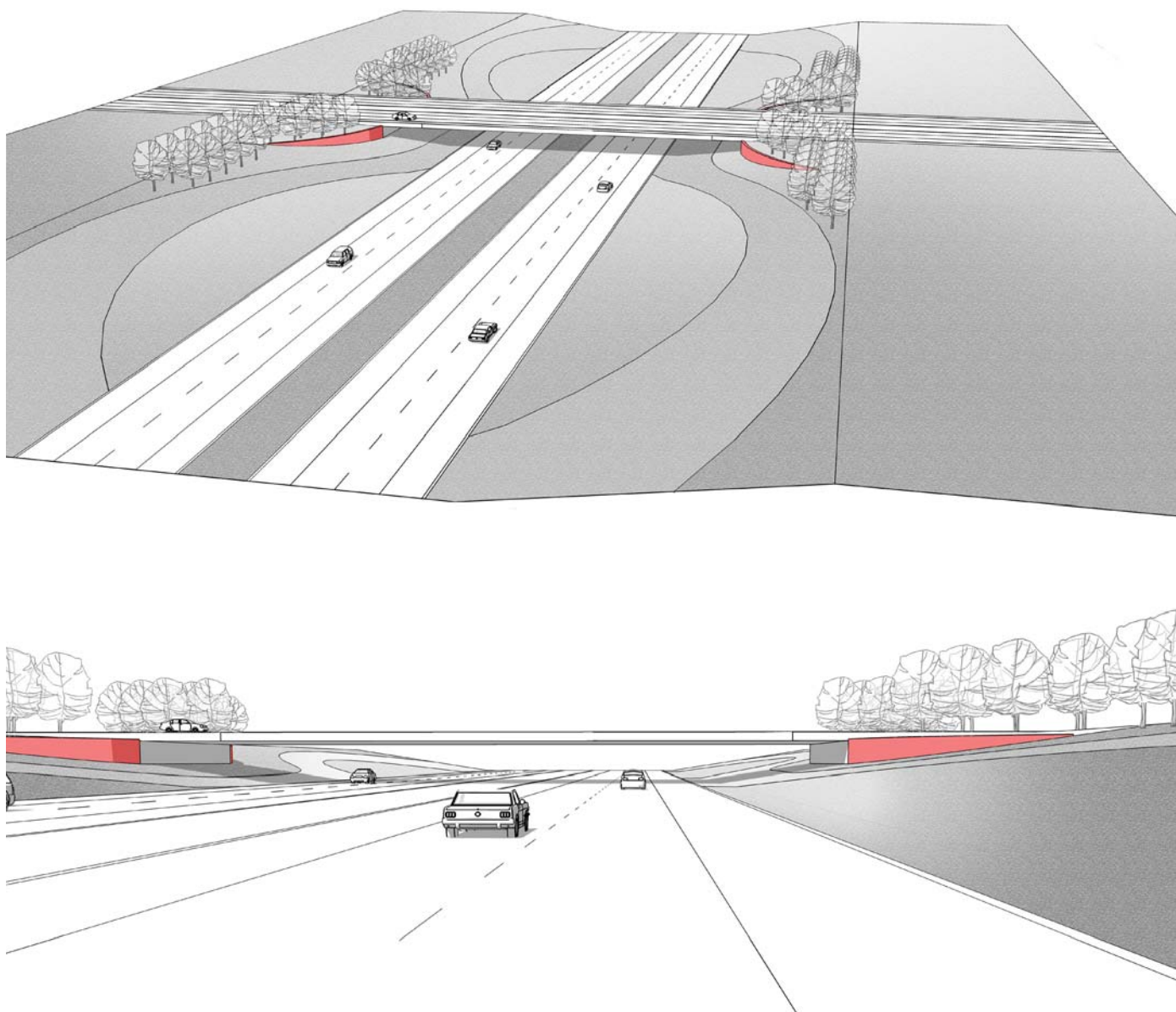


Figure 6.5 – Typical Freeway Gateway Monumentation (City Core)

These 3D graphics depict the typical monumentation design for the Freeway – City Core gateway. The curving walls (highlighted in red) will utilize the existing embankment topography at Belt Line Road and FM-1382 and will be made of smooth-cut limestone.

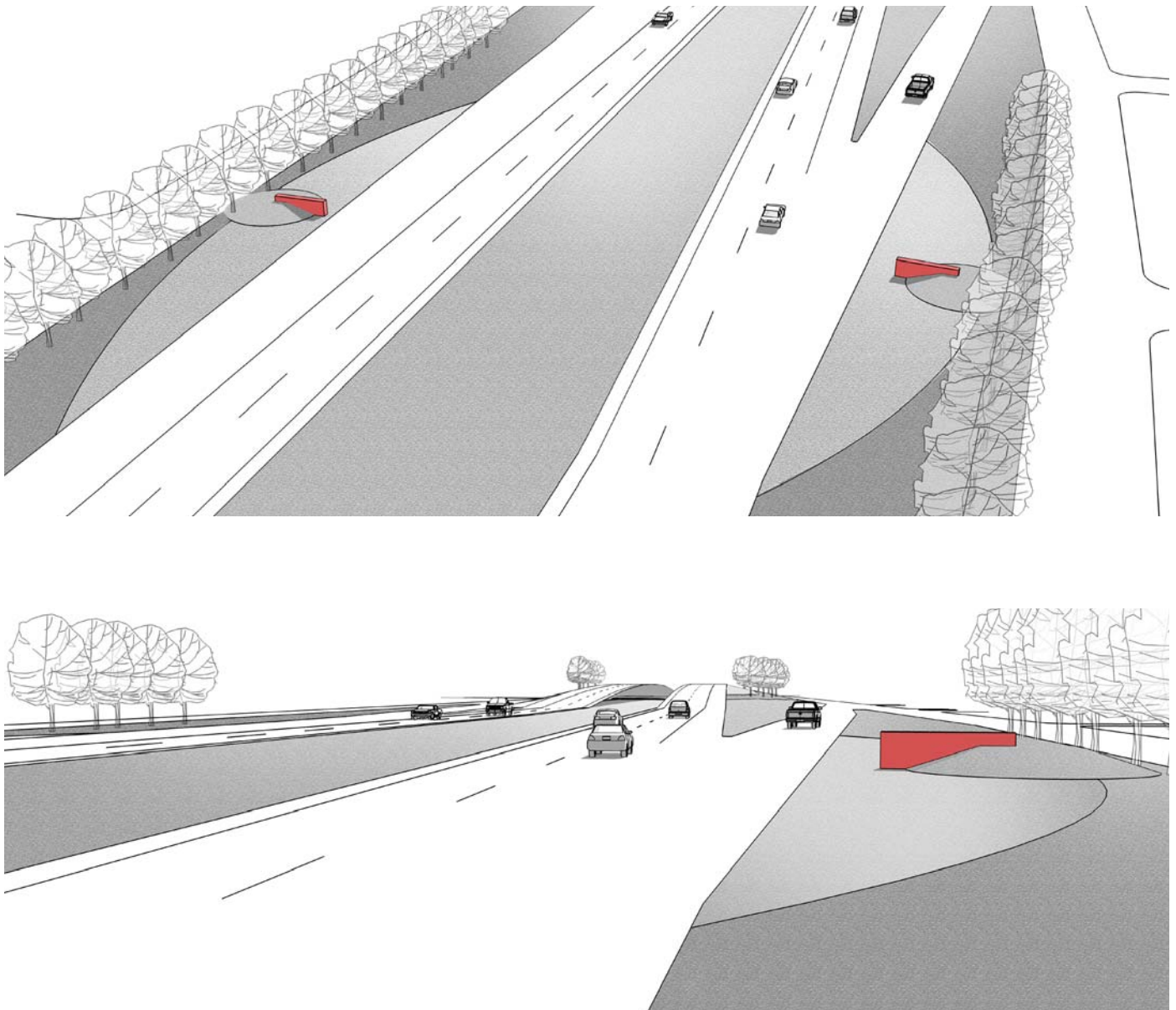


Figure 6.6 – Typical Freeway Gateway Monumentation (City Edge)

These 3D graphics depict the typical monumentation design for the Freeway – City Edge gateway. The straight walls (highlighted in red) will be made of rough limestone and will emerge from new berms, reminiscent of the white rock outcroppings emerging from Cedar Hill’s rolling hills. These will be located at the intersections with Joe Wilson Road and Lake Ridge Parkway.

6.5 CORE ARTERIALS

The Core Arterial typology includes streets in and around the Downtown and Uptown core of Cedar Hill. Streets that fall within this category include FM 1382, Belt Line Road, and Uptown Boulevard.

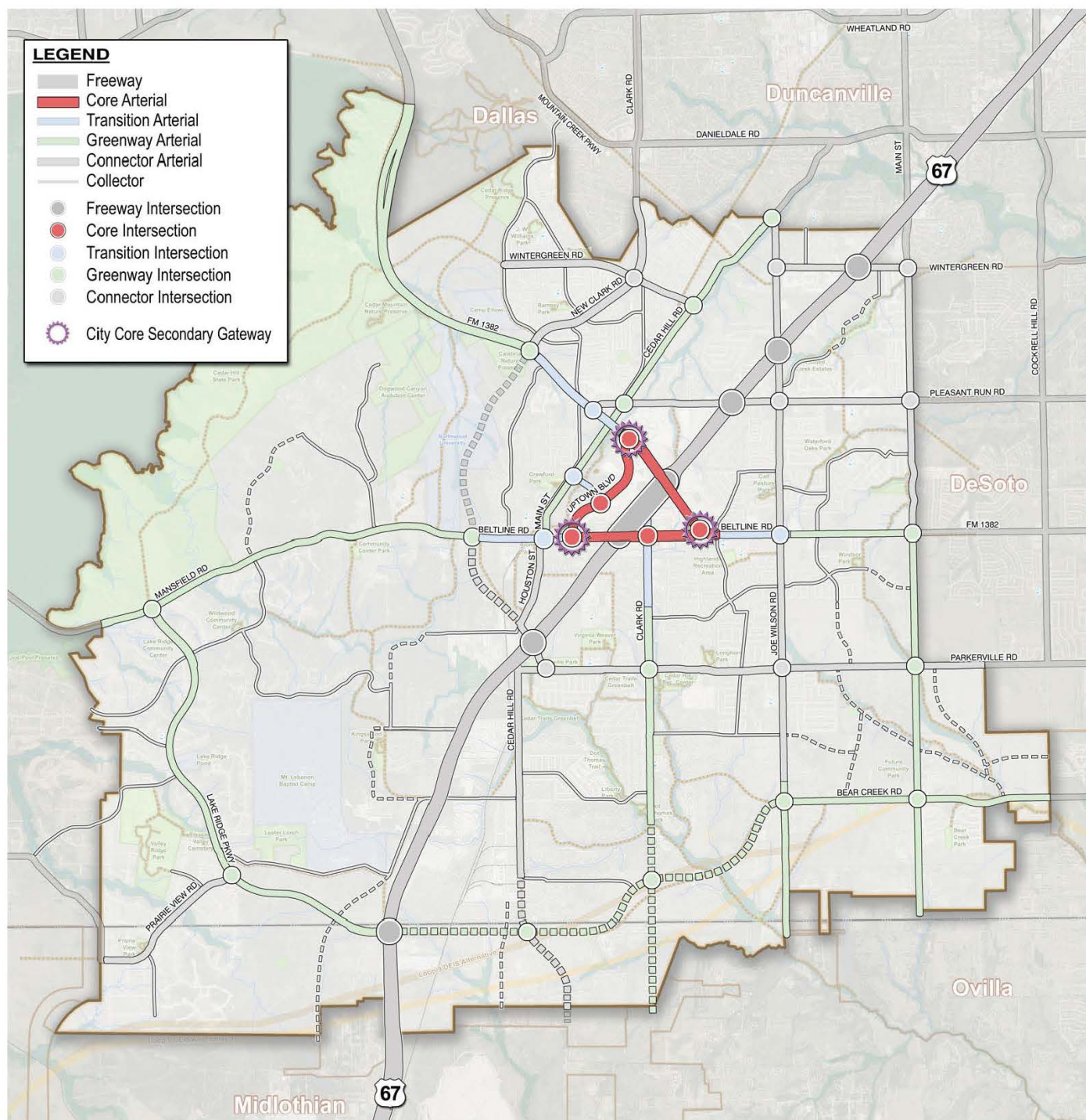


Figure 6.7 – Core Arterial Typology Map

This map shows the location of the Core Arterial streetscape typology and its major gateways.

Design Concepts

The following concepts shape the design of the Core Arterial typology:

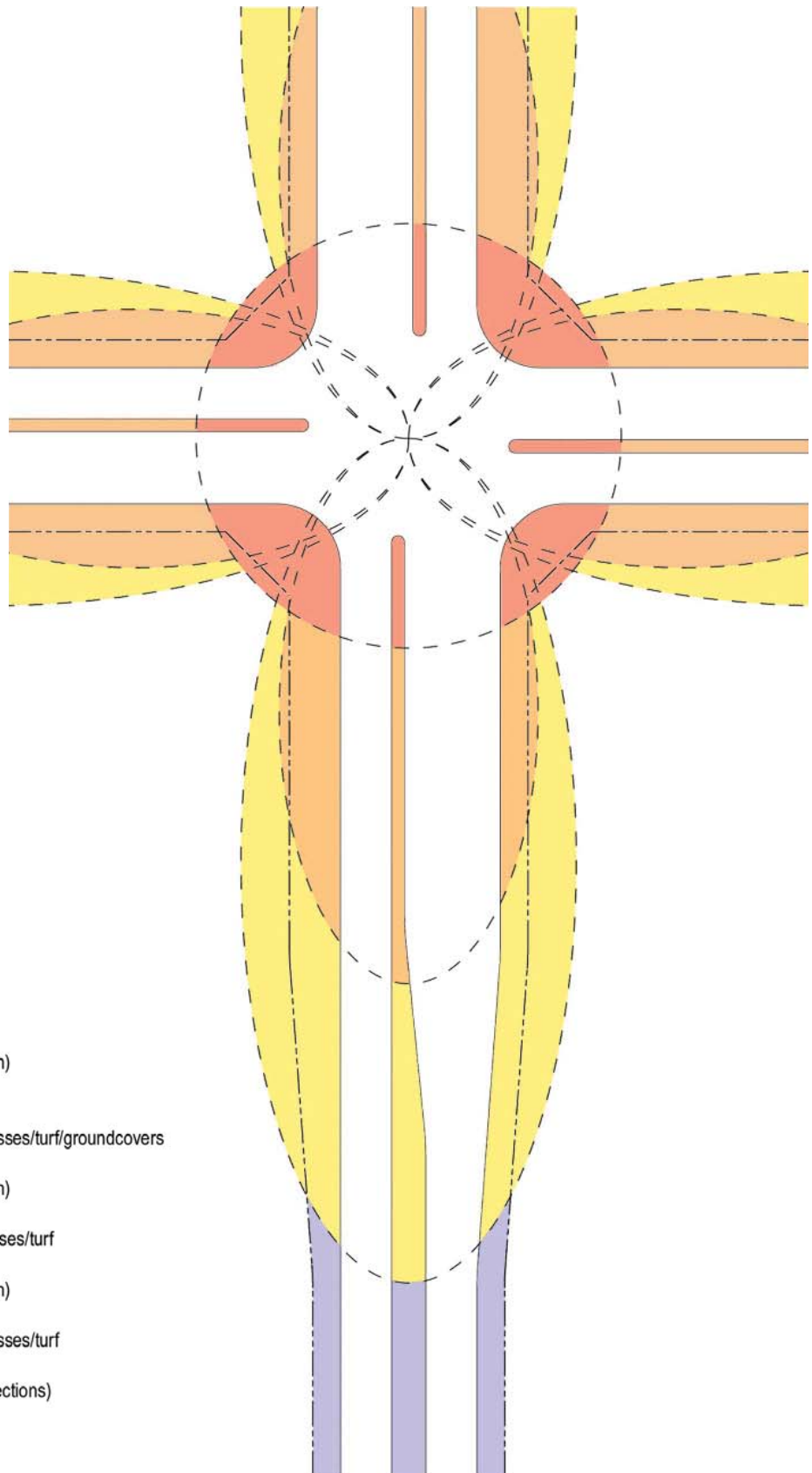
- Core Arterials are the focus or hub of Cedar Hill's thoroughfare system due to their central location. Many of the city's streets radiate from the core. Therefore, these streets are the heart of the streetscape system.
- Secondary gateways are provided at each of the three points of the Core Arterial triangle as bookends of the city center and termini to the transition from natural to urban that occurs in the Transition Arterial typology.
- Core Arterial intersections are designed to emphasize the intersection as a place, further emphasizing the city core as a destination that people want to visit.
- Reflective of the surrounding Downtown and Uptown environment, the selection of plant materials, hardscape elements, and monumentation is intended to accentuate and support adjacent development.
- Materials include finely detailed stone with a smooth texture and formal landscaping to contrast the rougher, organic nature of materials used in the outer areas of the city.
- The urban vibrancy and character of the area can be enhanced by utilizing public art in the shape of landscape forms, sculpture, or other art mediums.



Figure 6.8 – Core Arterial Conceptual Diagram

This diagram shows the various zones along the Core Arterial typology, centered on a typical intersection. This concept is intersection-focused with a high intensity of materials and ornamentation used in Zone 1. Low-growing shrubs, tall grasses, and enhanced paving emphasize the focal nature of the intersection. Streetscape intensity decreases through Zones 2 and 3 until reaching the lower-intensity nature of Zone 4, which extends between intersections.

Note: A series of five zone designations are used in each of the conceptual diagrams in this chapter. Not every zone designation will apply to each conceptual diagram. While there are minor differences within a zone between diagrams, the intent is that a specific zone designation in one diagram will have similar characteristics in terms of intensity and materials as the same designation in another diagram.



- Zone 1 (approx. 100' from center of intersection)
 - monumentation
 - major paving enhancements
 - medium to small shrubs/medium to low grasses/turf/groundcovers
- Zone 2 (approx. 250' from center of intersection)
 - understory trees
 - large to medium shrubs/tall to medium grasses/turf
- Zone 3 (approx. 400' from center of intersection)
 - understory trees/canopy trees
 - medium to small shrubs/medium to low grasses/turf
- Zone 4 (remaining streetscape between intersections)
 - canopy trees
 - medium to low grasses/turf

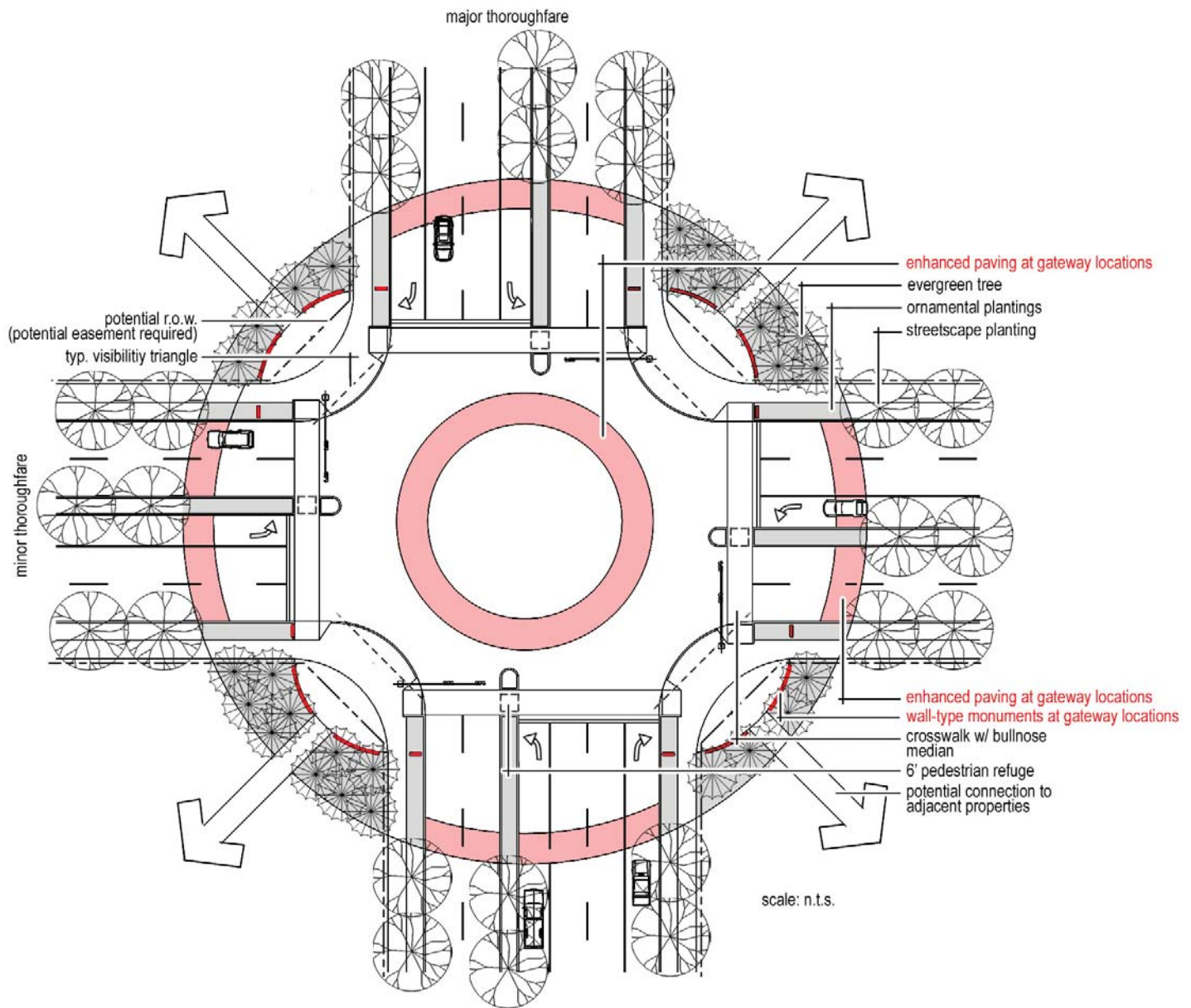


Figure 6.9 – Typical Core Arterial Intersection Treatment

Core Arterial intersections are located in areas with higher development intensities and have the potential for a higher level of pedestrian access to adjacent properties. These conditions lead to placing emphasis on the intersection as a place and incorporate potential connection points to adjacent properties. Enhanced paving and monumentation (highlighted in red) are to be applied at gateway locations. See Figure 6.7 for specific locations.

While the three main Core Arterial intersection locations (Belt Line Road/Uptown Boulevard, Uptown Boulevard/FM-1382, and FM-1382/Belt Line Road) constitute three-way “T” intersections of public streets, the latter two have major private driveways that make the locations function as four-way intersections. However, because of the unique nature of each intersection, this typical intersection concept will need to be manipulated on an individual basis to apply to the site.

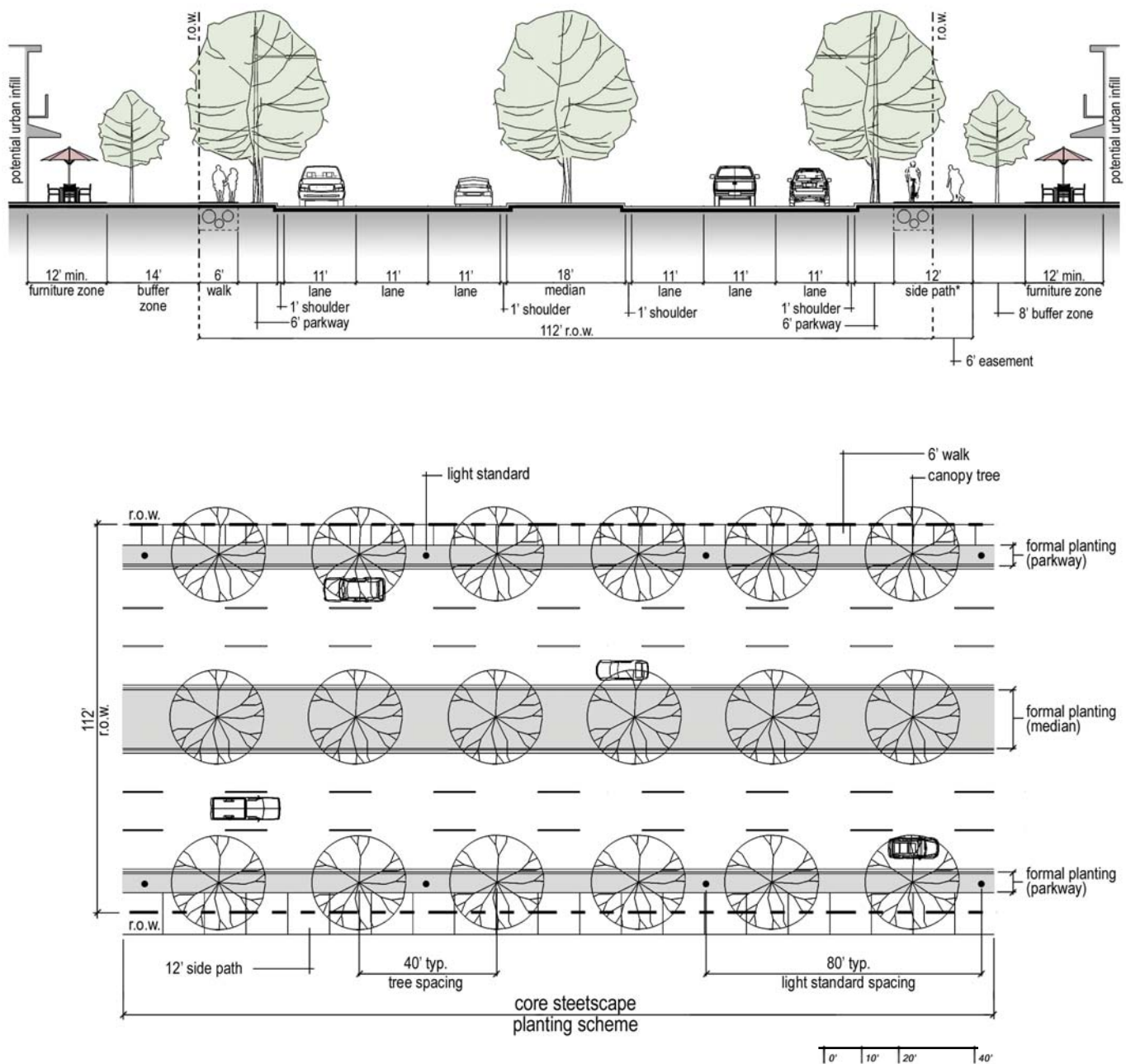


Figure 6.10 – Typical Core Arterial Section & Plan: Principal Arterial

The intent of the principal arterial is to accommodate large vehicular traffic volumes while enhancing the aesthetic quality of the streetscape and accommodating alternative transportation. A wide (12') sidepath is provided on at least one side for bicycles and pedestrians. When space allows, parallel water, sewer, or gas lines should not be placed under sidepaths, sidewalks, or trees. However, placement under sidepaths and sidewalks is preferable to placement under trees. FM-1382 and Belt Line Road east of US-67 are principal arterials. While Uptown Boulevard currently functions as a minor arterial, it may be upgraded to a 4-6 lane principal arterial in the future (see the Thoroughfare Plan map in the 2008 Comprehensive Plan). If it remains 4 lanes, it will include bike lanes as illustrated in Figure 6.11.

The section illustrated varies slightly from the typical section in the 2008 Thoroughfare Plan. Namely, the median is 2' wider to accommodate a 6' pedestrian refuge (recommended by the Federal Highway Administration), an 11' left turn lane, and the necessary curb and gutter. In addition, lane widths are 1' narrower in consideration of the wider median and to separate the curb and gutter from the inside and outside travel lanes while remaining within the same roadway footprint.

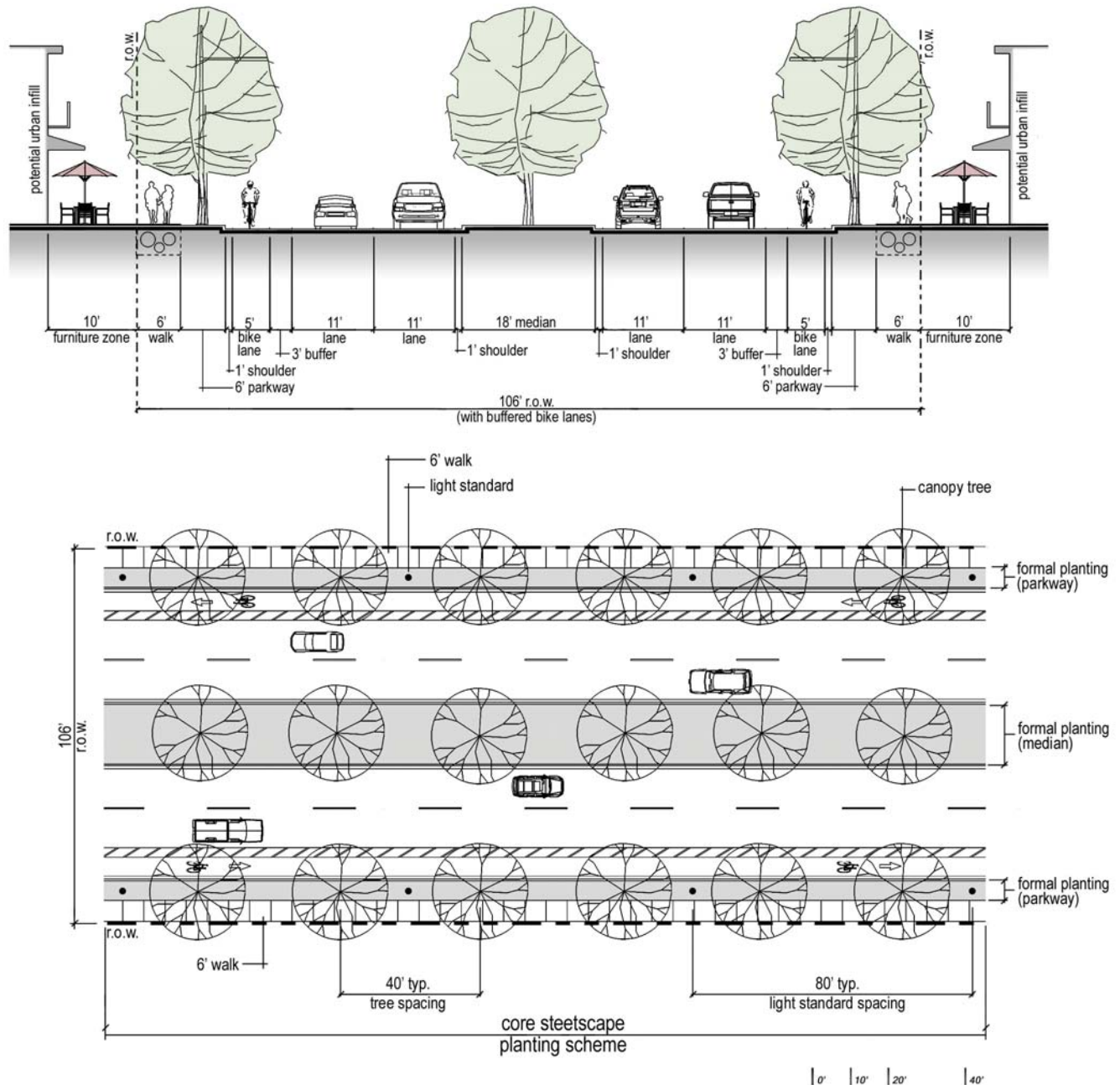


Figure 6.11 – Typical Core Arterial Section & Plan: Minor Arterial

Minor arterials typically have lower traffic volumes than principal arterials. The enhancement of the streetscape's aesthetics is balanced by a higher level of service for pedestrians and bicycles, which are each given their own travelways. Pedestrians have access to 6' sidewalks on both sides of the street while bicycles enjoy dedicated bike lanes separated from cars by a 3' painted buffer. When space allows, parallel water, sewer, or gas lines should not be placed under sidepaths, sidewalks, or trees. However, placement under sidepaths and sidewalks is preferable to placement under trees. Belt Line Road west of US-67 and Uptown Boulevard are minor arterials.

The section illustrated varies slightly from the typical section in the 2008 Thoroughfare Plan. Namely, the median is 2' wider to accommodate a 6' pedestrian refuge (recommended by the Federal Highway Administration), an 11' left turn lane, and the necessary curb and gutter. In addition, lane widths are 1' narrower in consideration of the wider median and to separate the curb and gutter from the inside and outside travel lanes. Finally, an additional 8' of pavement width on each side of the roadway is included in these sections to accommodate buffered bike lanes. These changes necessitate additional right-of-way or placement of sidewalks and utilities in landscape easements.

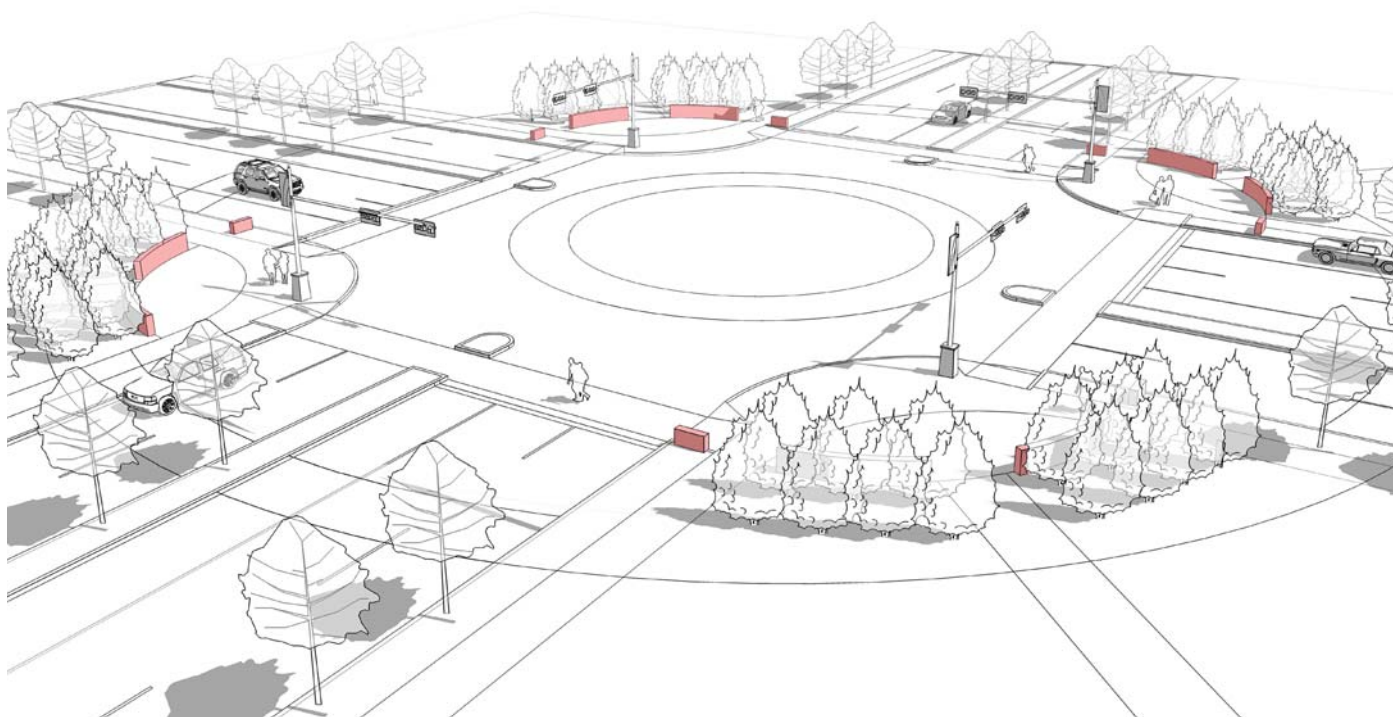


Figure 6.12 – Typical Core Arterial Gateway Monumentation (Bird’s Eye View)

This graphic shows the typical layout and monumentation design for the City Core Secondary Gateways (see Figure 6.7). The curving walls (highlighted in red) help emphasize the focal nature of the intersection.

While the three main Core Arterial intersection locations (Belt Line Road/Uptown Boulevard, Uptown Boulevard/FM-1382, and FM-1382/Belt Line Road) constitute three-way “T” intersections of public streets, the latter two have major private driveways that make the locations function as four-way intersections. However, because of the unique nature of each intersection, this typical intersection concept will need to be manipulated on an individual basis to apply to the site.

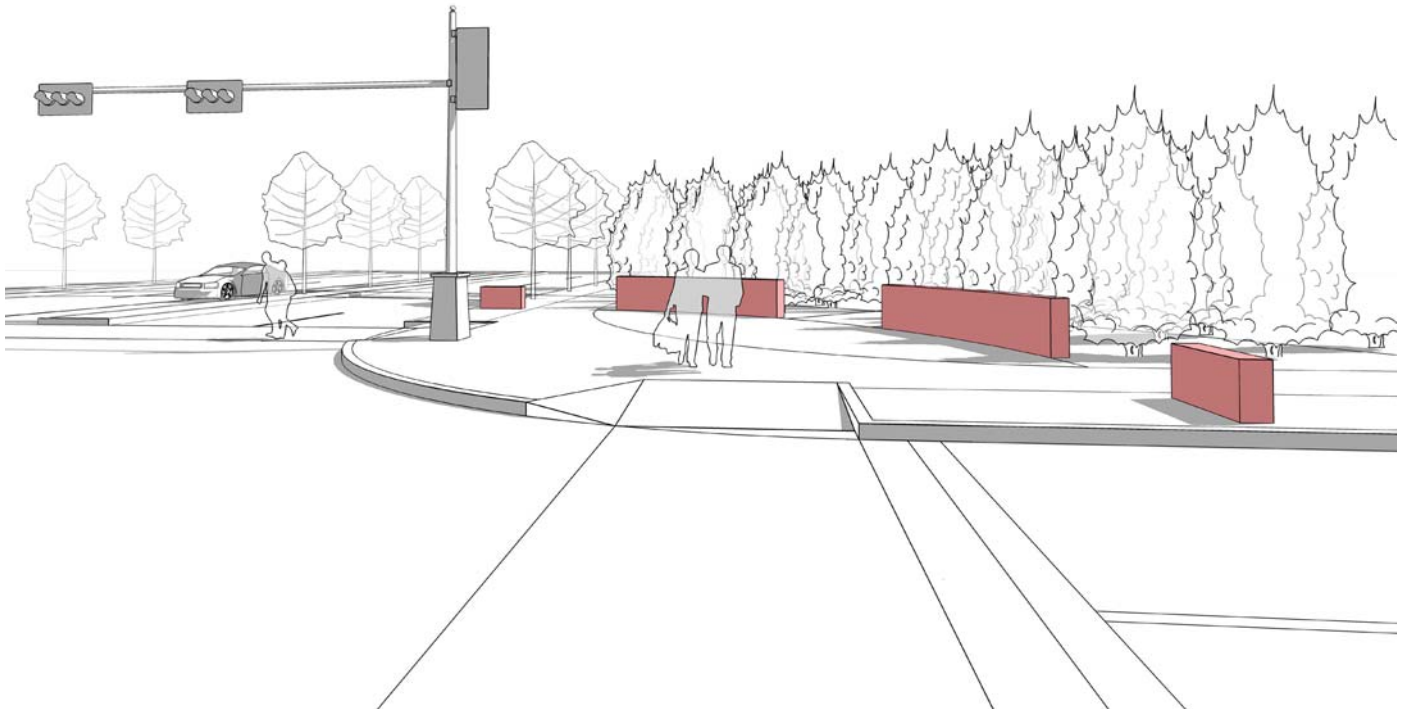


Figure 6.13 – Typical Core Arterial Gateway Monumentation (Ground View)

This graphic details the curved walls to be incorporated in the City Core Secondary Gateways. These walls will be constructed of smooth-cut limestone and other formal materials.

While the three main Core Arterial intersection locations (Belt Line Road/Uptown Boulevard, Uptown Boulevard/FM-1382, and FM-1382/Belt Line Road) constitute three-way “T” intersections of public streets, the latter two have major private driveways that make the locations function as four-way intersections. However, because of the unique nature of each intersection, this typical intersection concept will need to be manipulated on an individual basis to apply to the site.

6.6 TRANSITION ARTERIALS

The Transition Arterial typology includes segments of streets that connect Core Arterials to Greenway Arterials. As its name suggests, the purpose of this streetscape typology is to provide a transition between the formal intensity of the Core Arterials and the organic nature of the Greenway Arterials.

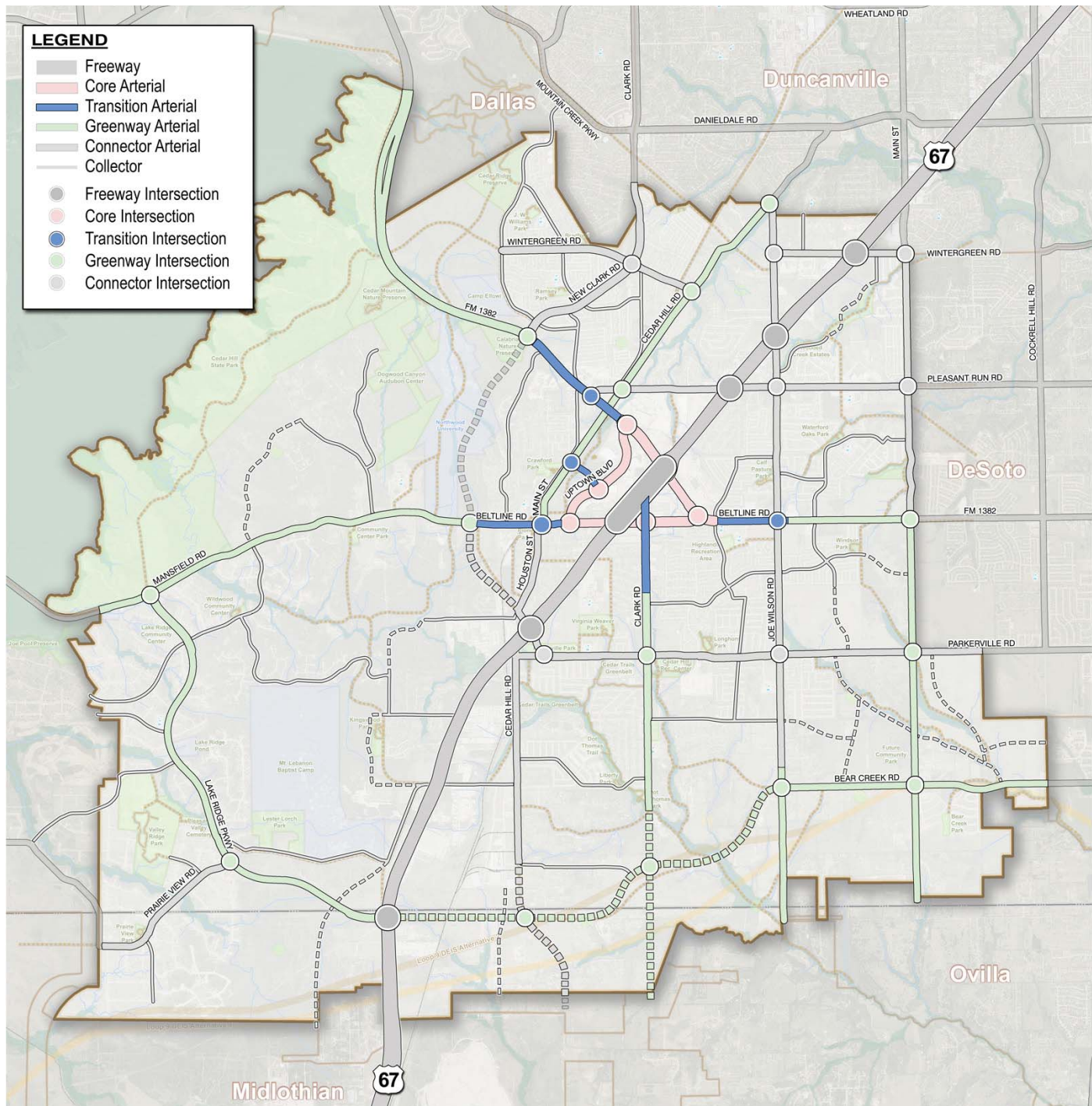


Figure 6.14 – Transition Arterial Typology Map

This map shows the location of the Transition Arterial streetscape typology. This typology does not have accompanying gateways.

Design Concepts

The following concepts shape the design of the Transition Arterial typology:

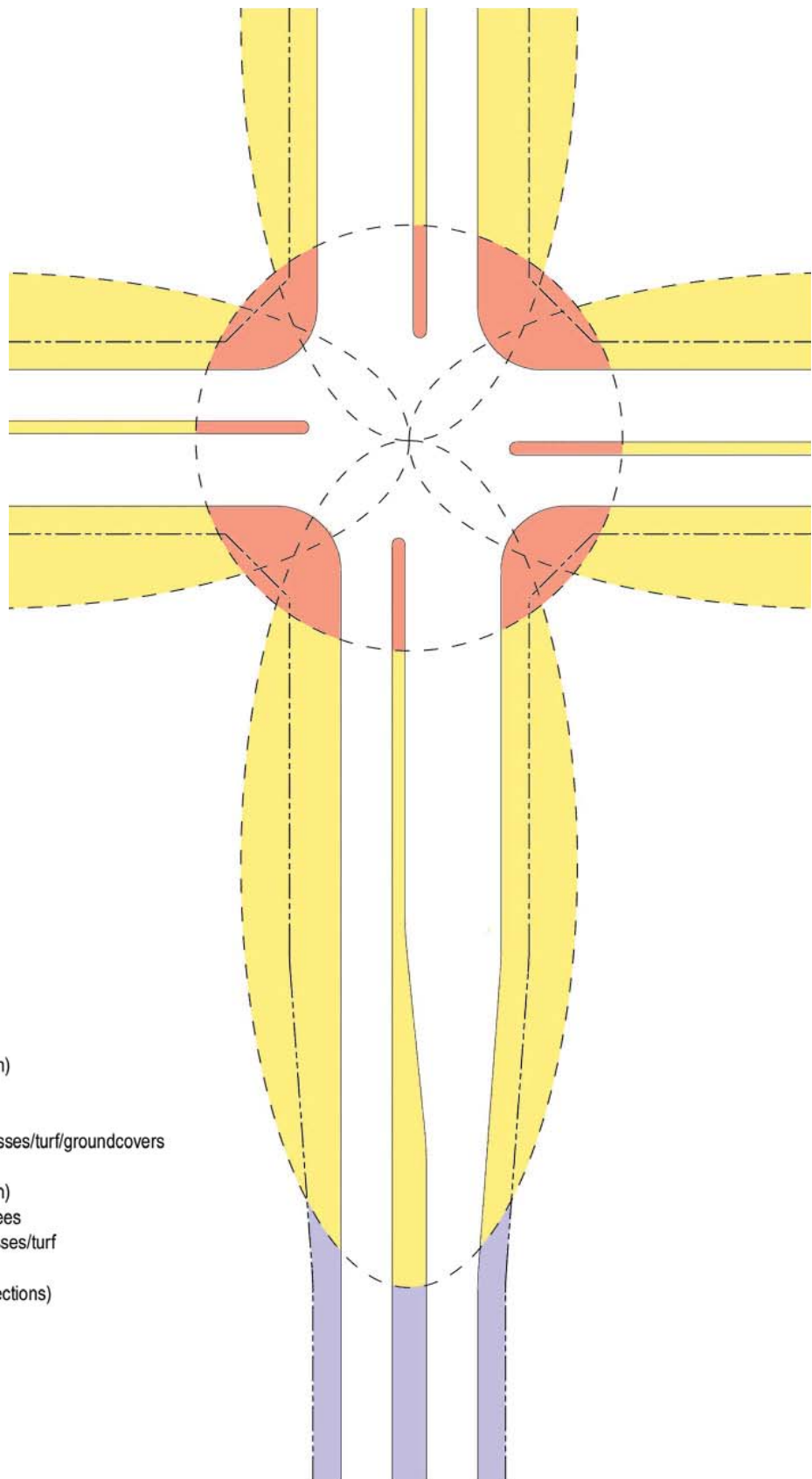
- These streetscapes transition between the vibrant, formal character of the Core Arterial typology and the organic, natural character of the Greenway Arterial typology.
- Formalized plantings are incorporated along the outside edges of the roadway (similar to Core Arterials) with informal/natural groupings of plantings within the medians (similar to Greenway Arterials).
- A primary function of Transition Arterials is to link the Greenway Arterial system—including its parallel trails—with the city center.
- Subtle monumentation is used at intersections to emphasize continuity within the city.
- Materials used include clean-lined modern finishes combined with contrasting natural, rough edges. This combination is an expression of the interface between the rural and urban context of the city.



Figure 6.15 – Transition Arterial Conceptual Diagram

This diagram shows the various zones along the Transition Arterial typology, centered on a typical intersection. Like the Core Arterial concept, this design concept is intersection-focused, but with a simplified approach. The incorporation of shrubs and grasses at the intersection with a blend of trees and ground plane elements as the intersection merges with the streetscape help convey the essence of transition.

Note: A series of five zone designations are used in each of the conceptual diagrams in this chapter. Not every zone designation will apply to each conceptual diagram. While there are minor differences within a zone between diagrams, the intent is that a specific zone designation in one diagram will have similar characteristics in terms of intensity and materials as the same designation in another diagram.



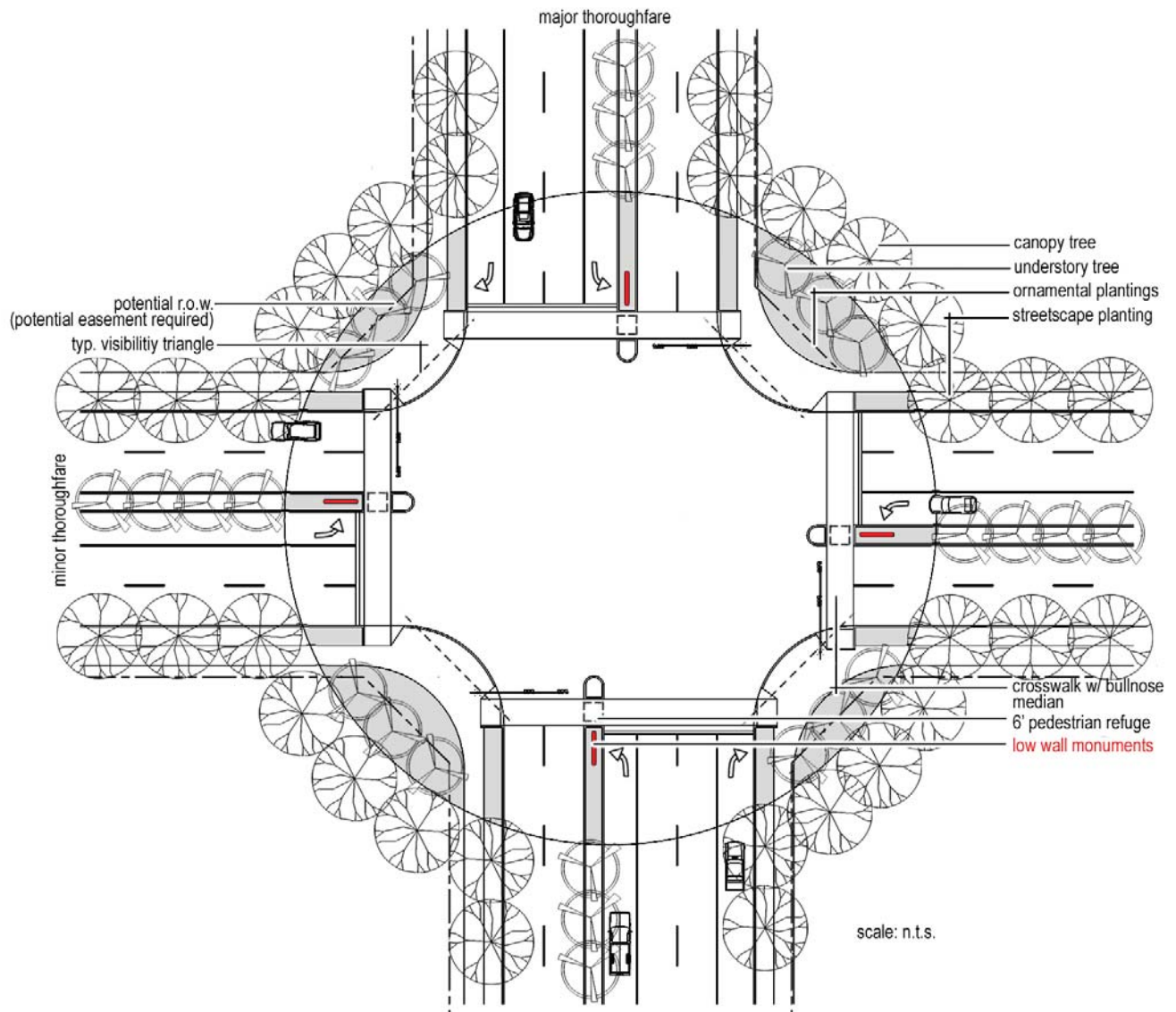


Figure 6.16 – Typical Transition Arterial Intersection Treatment

Transition Arterial intersections are located in areas of transition and are given less emphasis than other intersection types. These intersections incorporate subtle monumentation that provides a unifying element repeated throughout the city. These monuments are highlighted in red. See Figure 6.14 for specific locations.

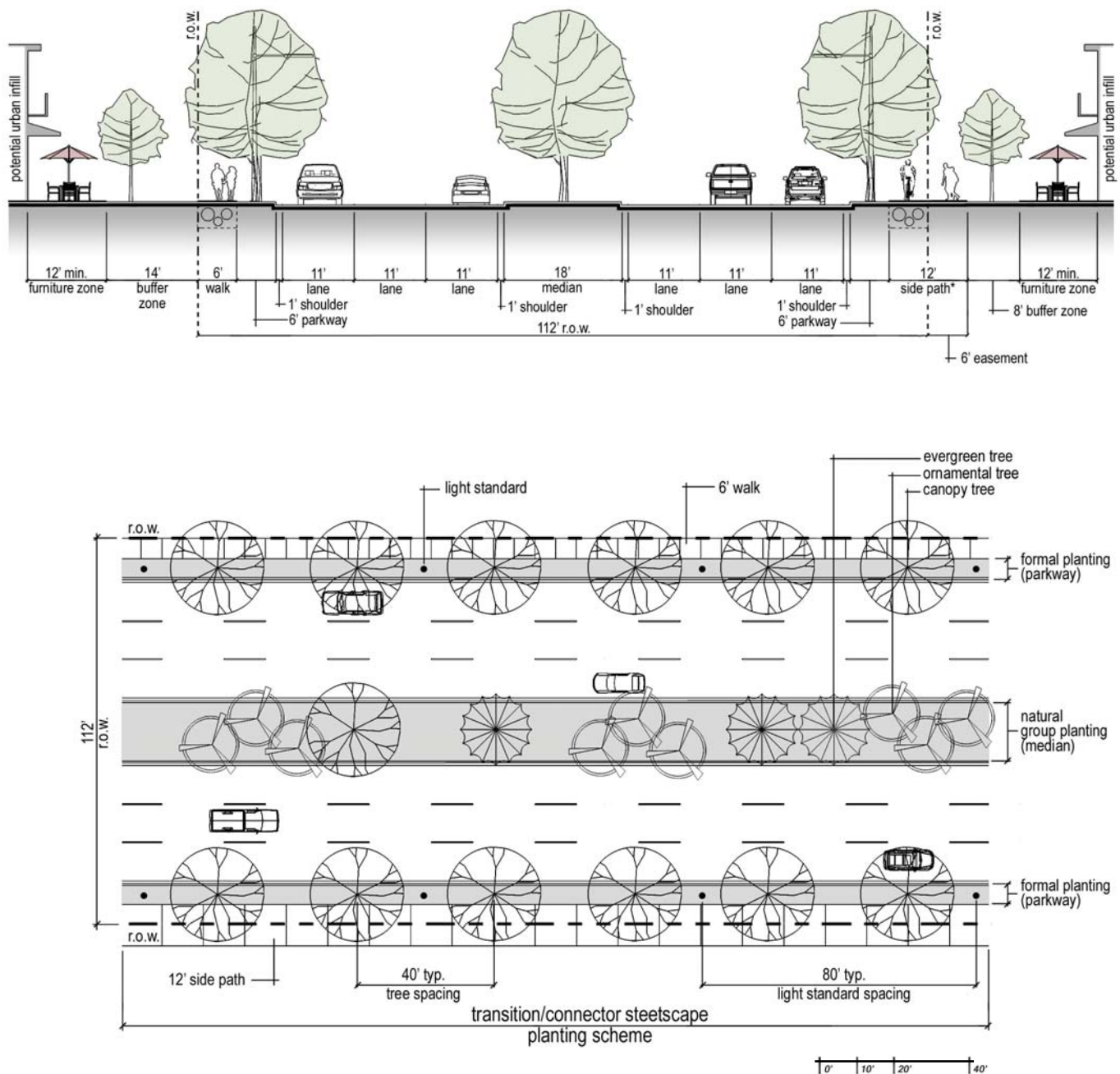


Figure 6.17 – Typical Transition Arterial Section & Plan: Principal Arterial

The intent of the principal arterial as applied to Transition Arterials is the same as that of Core Arterials, including bicycle and pedestrian accommodations. The primary difference lies within the landscaping, which incorporates formalized plantings on the roadway edges and more naturalistic plantings in the medians. When space allows, parallel water, sewer, or gas lines should not be placed under sidepaths, sidewalks, or trees. However, placement under sidepaths and sidewalks is preferable to placement under trees. The portions of FM-1382, Belt Line Road (east of US-67), and Clark Road that fall within the Transition Arterial typology are also principal arterials.

The section illustrated varies slightly from the typical section in the 2008 Thoroughfare Plan. Namely, the median is 2' wider to accommodate a 6' pedestrian refuge (recommended by the Federal Highway Administration), an 11' left turn lane, and the necessary curb and gutter. In addition, lane widths are 1' narrower in consideration of the wider median and to separate the curb and gutter from the inside and outside travel lanes while remaining within the same roadway footprint.

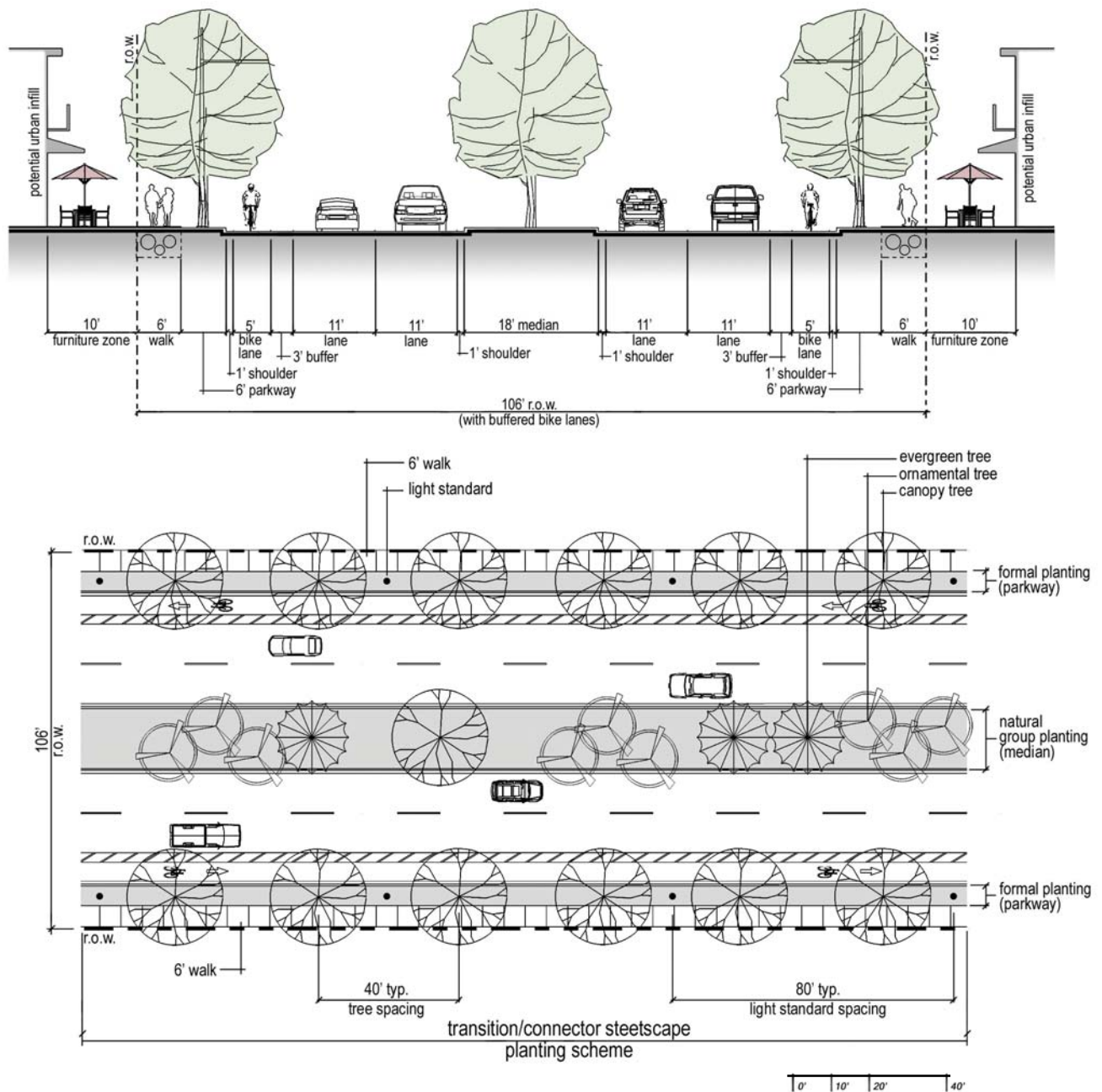


Figure 6.18 – Typical Transition Arterial Section & Plan: Minor Arterial

As with principal arterials, minor arterials with the Transition Arterial typology serve the same function and purpose as minor arterials with the Core Arterial typology, but have differences in landscaping. When space allows, parallel water, sewer, or gas lines should not be placed under sidepaths, sidewalks, or trees. However, placement under sidepaths and sidewalks is preferable to placement under trees. Belt Line Road west of US-67 and Pioneer Parkway are minor arterials.

The section illustrated varies slightly from the typical section in the 2008 Thoroughfare Plan. Namely, the median is 2' wider to accommodate a 6' pedestrian refuge (recommended by the Federal Highway Administration), an 11' left turn lane, and the necessary curb and gutter. In addition, lane widths are 1' narrower in consideration of the wider median and to separate the curb and gutter from the inside and outside travel lanes. Finally, an additional 8' of pavement width on each side of the roadway is included in these sections to accommodate buffered bike lanes. These changes necessitate additional right-of-way or placement of sidewalks and utilities in landscape easements.



Figure 6.19 – Typical Transition Arterial Gateway Monumentation

This graphic shows the typical layout and monumentation design for the Transition Arterial intersections (see Figure 6.14). The small monumentation walls (highlighted in red) reflect the character of larger monumentation within the city and serve as a unifying element.



Figure 6.20 – Typical Transition Arterial Gateway Monumentation (Detail)

The small monumentation walls will be located within medians and will be low enough to not impact motorists' visibility.

6.7 GREENWAY ARTERIALS

Greenway Arterials highlight the natural beauty of Cedar Hill and help connect the natural landscapes of the periphery with the Core of the City. These roadways include wide parkways that accommodate multi-use paths for bicycles and pedestrians.

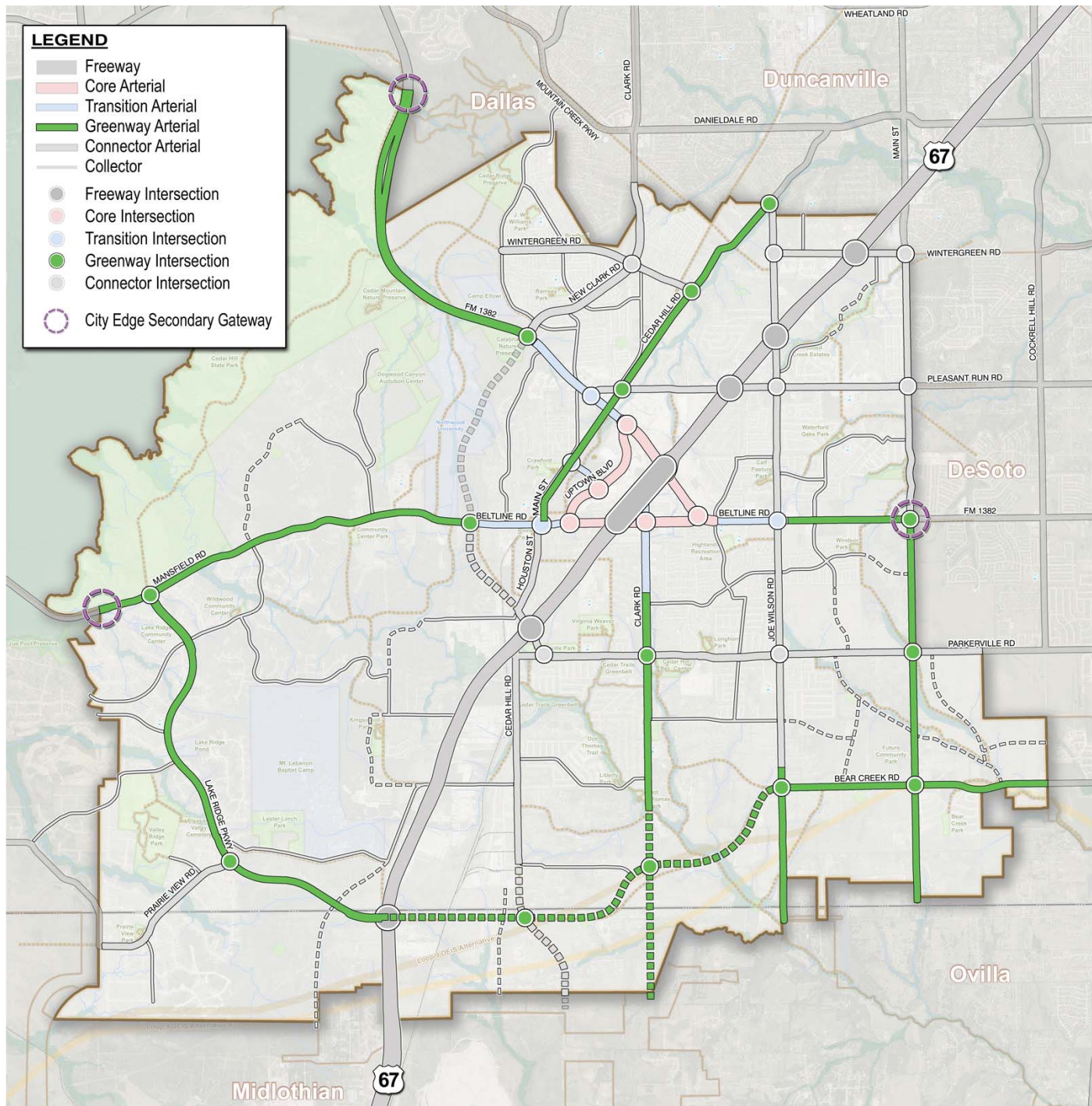


Figure 6.21 – Greenway Arterial Typology Map

This map shows the location of the Greenway Arterial streetscape typology and its accompanying gateways.

Design Concepts

The following concepts shape the design of the Greenway Arterial typology:

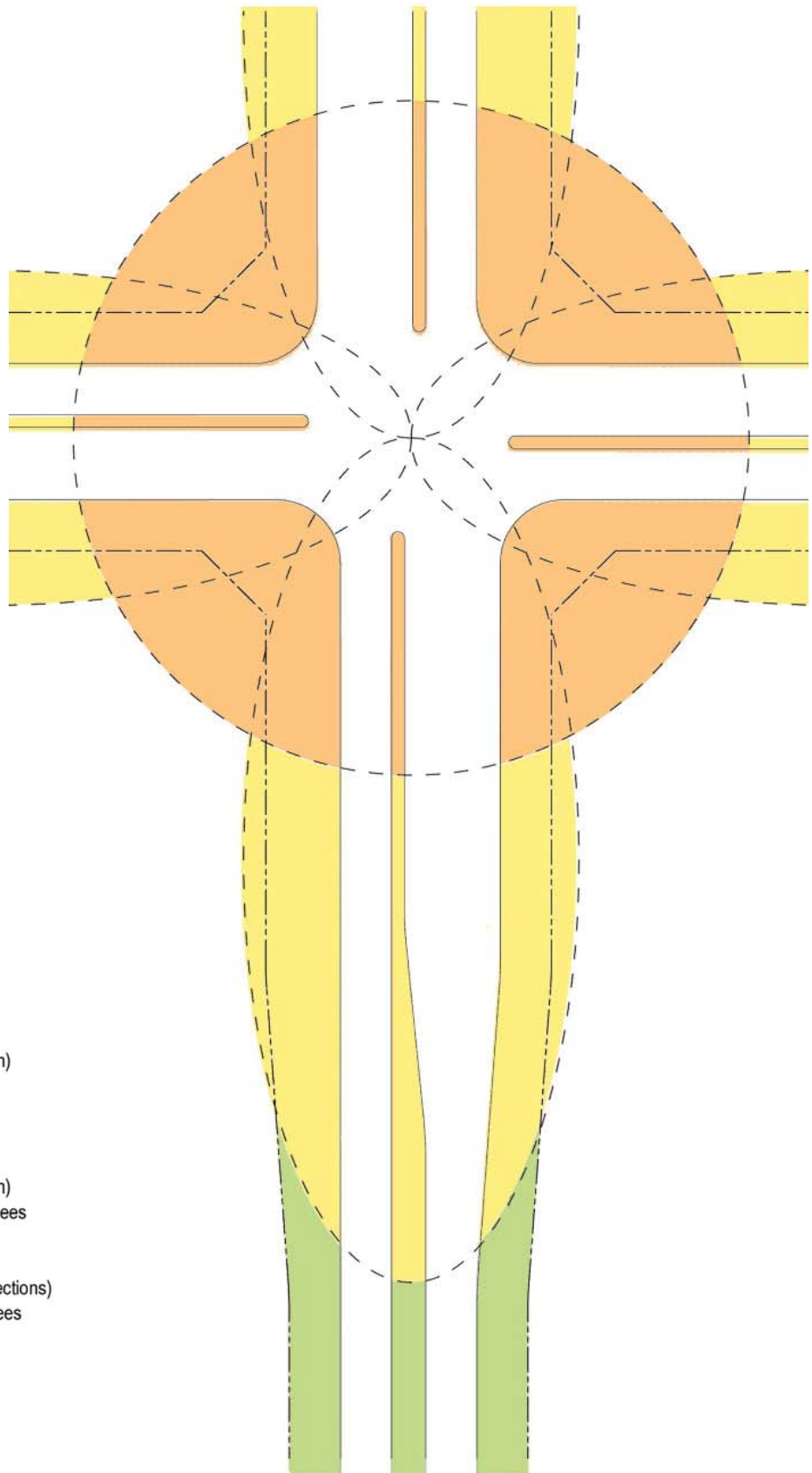
- Key emphasis is placed on the preservation and accentuation of the natural beauty of Cedar Hill. This means plant material selections accent the adjacent vegetation rather than distracting from the surrounding natural beauty. In addition, existing landforms are used (where applicable) to emphasize a gateway and to be an integral part of the monumentation.
- The character of the natural environment drives material selection and form of monumentation. This includes natural, rough stone to accentuate or reference the Balcones Escarpment outcroppings and minimal yet impactful monument forms.
- Landscaping within the corridors and at intersections will be informal, utilizing natural groupings of plantings and focusing on large zones of plant materials rather than detailed landscaping.
- Greenway corridors will provide a high level of service for pedestrians and bicycles, providing safe, comfortable, and enjoyable multi-use pathways parallel to yet buffered from the roadway.
- The Greenway corridors along Mansfield Road, Belt Line Road, FM-1382, and Clark Road serve to extend the natural beauty of Cedar Hill into the city center.



Figure 6.22 – Greenway Arterial Conceptual Diagram

This diagram shows the various zones along the Greenway Arterial typology, centered on a typical intersection. In contrast with other streetscape typologies, this concept foregoes a high-intensity Zone 1 and extends Zone 2 to the intersection to emphasize adjacent natural features. Also in contrast with other streetscape typologies is the use of the Zone 5 designation, which is the lowest intensity and most naturalistic zone in the entire Streetscape Plan.

Note: A series of five zone designations are used in each of the conceptual diagrams in this chapter. Not every zone designation will apply to each conceptual diagram. While there are minor differences within a zone between diagrams, the intent is that a specific zone designation in one diagram will have similar characteristics in terms of intensity and materials as the same designation in another diagram.



- Zone 2 (approx. 150' from center of intersection)**
 - monumentation
 - medium to low grasses
 - understory trees
- Zone 3 (approx. 400' from center of intersection)**
 - canopy trees/ understory trees/evergreen trees
 - tall to medium grasses
- Zone 5 (remaining streetscape between intersections)**
 - canopy trees/understory trees/evergreen trees
 - native grass seed

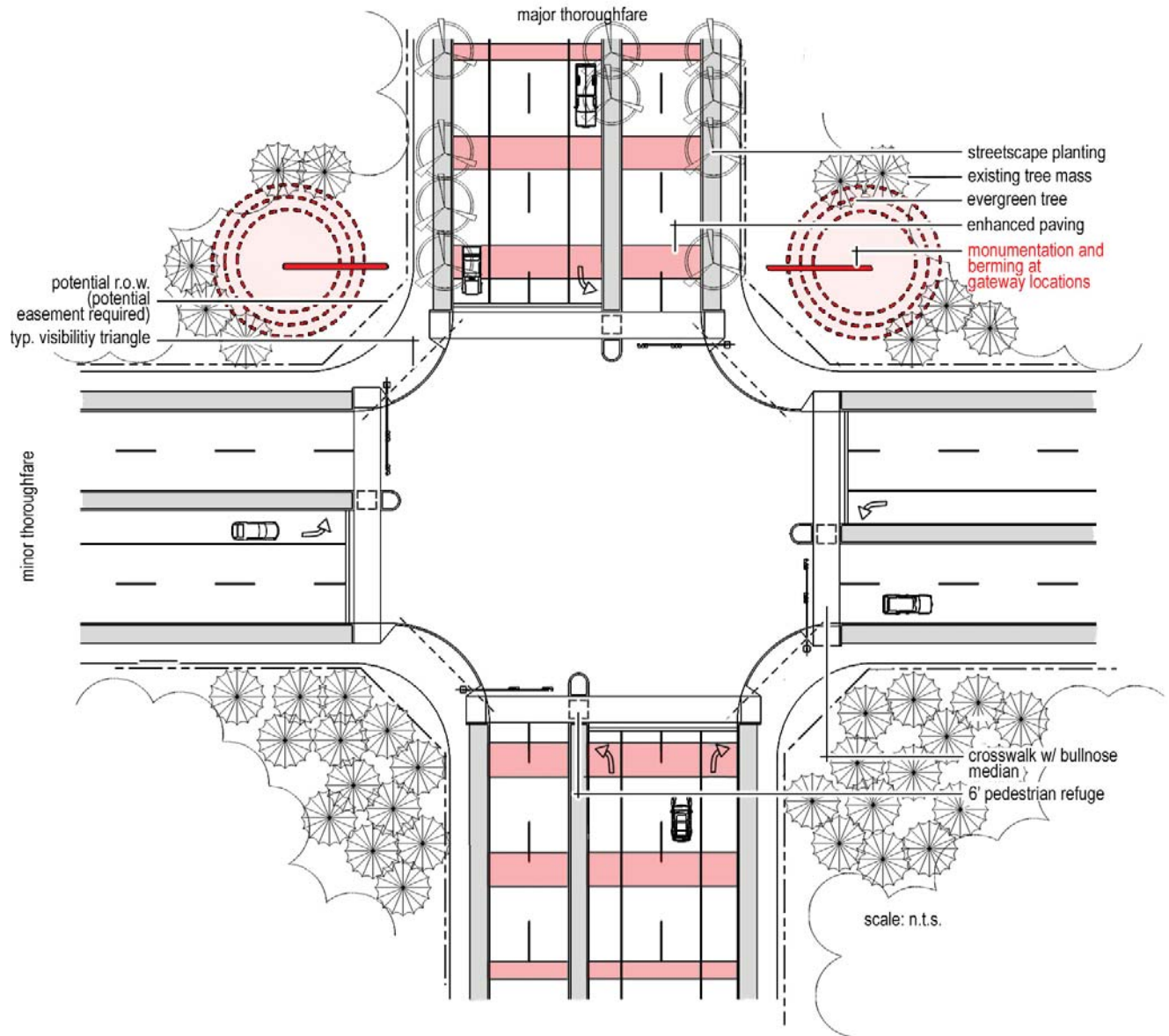


Figure 6.23 – Typical Greenway Arterial Intersection Treatment

Greenway Arterial intersections are intended to be organic in form and large in scale, minimizing manicured and detailed landscaping, such as geometric arrangements. City Edge Secondary Gateways exist along Greenway Arterials. Since they are located at the edges of the city, they are positioned on the Cedar Hill side of the intersection only. The monuments, berms, and paving patterns associated with City Edge Secondary Gateways are highlighted in red. At Greenway intersections that are not gateway locations, man-made elements will be minimized. Instead, existing vegetation will be preserved on each corner and supplemented with naturalistic plantings if needed. See Figure 6.21 for specific locations of the gateways and intersections.

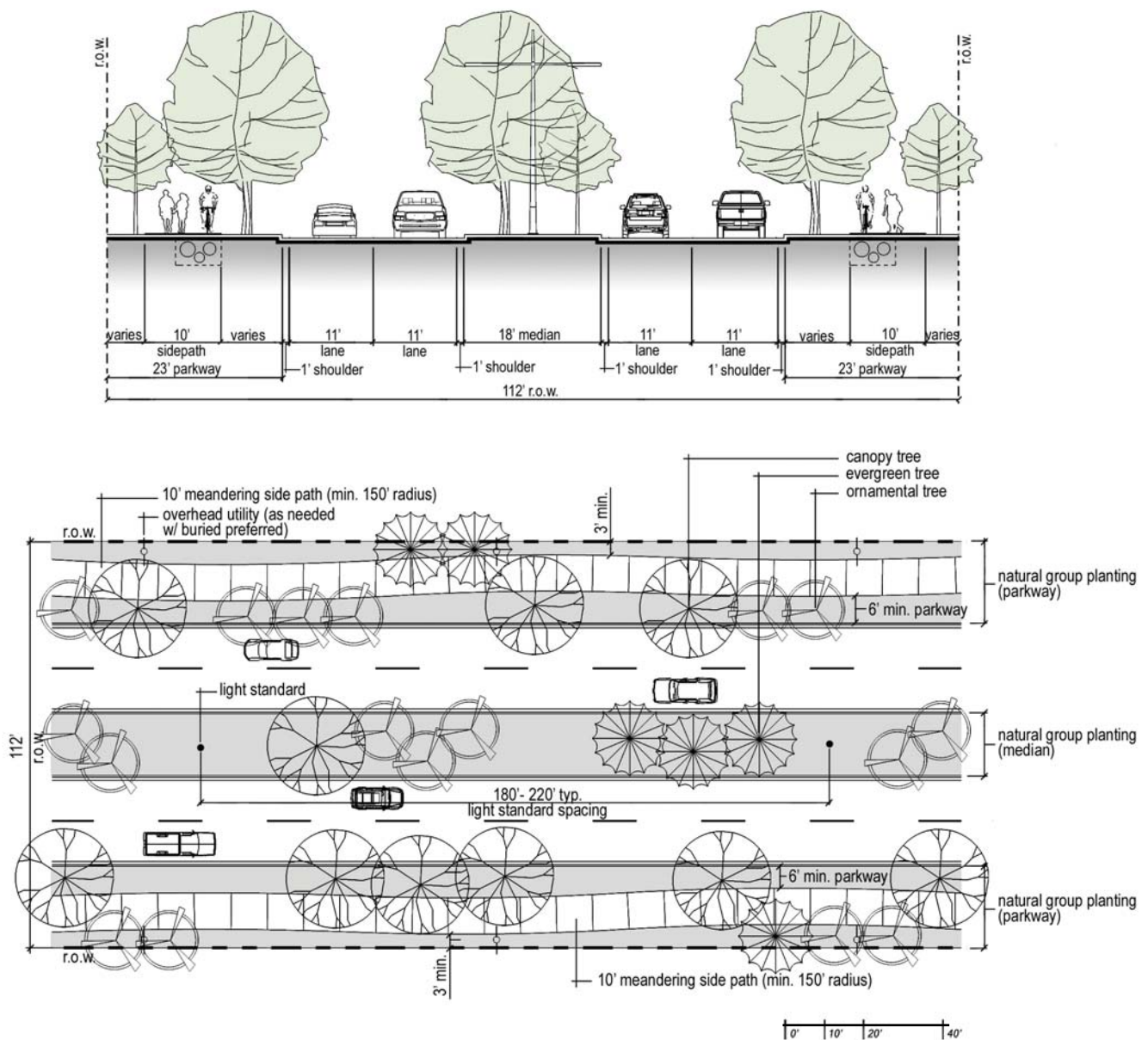


Figure 6.24 – Typical Greenway Arterial Section & Plan: Centered Arterial

Greenway Arterials provide expansive parkways and medians, as well as dual 10' to 12' wide sidepaths for bicycles and pedestrians on each side (on-street bike lanes may still be provided). As opposed to most arterial roadways, approximately half of the right-of-way is unpaved in a Greenway Arterial corridor. In order to minimize future conflicts between overhead utilities and trees, utilities will be placed immediately outside of the right-of-way in a utility easement. Where reasonable, underground utilities will be installed. When space allows, parallel water, sewer, or gas lines should not be placed under sidepaths, sidewalks, or trees. However, placement under sidepaths and sidewalks is preferable to placement under trees. This will be the most common type of Greenway Arterial configuration.

The section illustrated varies slightly from the typical section in the 2008 Thoroughfare Plan. Namely, the median is 2' wider to accommodate a 6' pedestrian refuge (recommended by the Federal Highway Administration), an 11' left turn lane, and the necessary curb and gutter. In addition, parkways are 1' narrower in consideration of the wider median and lane widths are 1' narrower to separate the curb and gutter from the inside and outside travel lanes while remaining within the same roadway footprint.

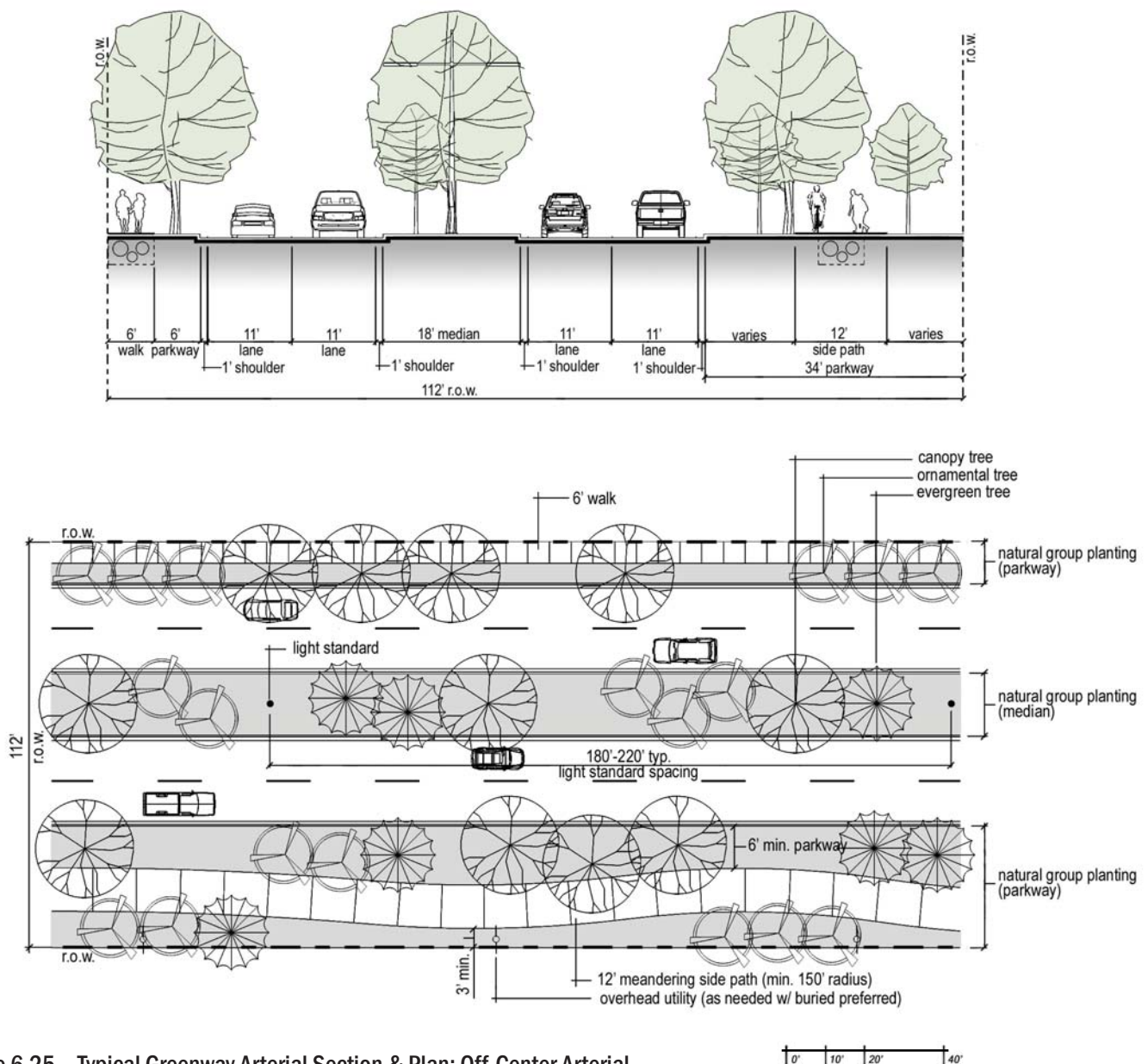


Figure 6.25 – Typical Greenway Arterial Section & Plan: Off-Center Arterial

The Off-Center Greenway Arterial moves the roadway to one side of the right-of-way, thereby providing one extra-wide parkway on a single side. This allows a wider 12' pathway for bicycles and pedestrians and allows wider meanders for the pathway (on-street bike lanes may still be provided). A 6' wide sidewalk is provided on the opposite side of the road. As with the Centered Arterial section (Figure 6.24), approximately half of the right-of-way is unpaved in this roadway type. Overhead utilities will be placed on the expanded parkway side. Where reasonable, underground utilities will be installed. When space allows, parallel water, sewer, or gas lines should not be placed under sidepaths, sidewalks, or trees. However, placement under sidepaths and sidewalks is preferable to placement under trees. This Greenway Arterial configuration will be used where a more continuous park environment is desired along one side of the roadway. As much as is feasible, driveways and intersections on the expanded parkway side of the road will be minimized.

The section illustrated varies slightly from the typical section in the 2008 Thoroughfare Plan. Namely, the median is 2' wider to accommodate a 6' pedestrian refuge (recommended by the Federal Highway Administration), an 11' left turn lane, and the necessary curb and gutter. In addition, lane widths are 1' narrower to separate the curb and gutter from the inside and outside travel lanes while remaining within the same roadway footprint. Finally, the parkways are narrower in consideration of the wider median and the centerline of the roadway has been shifted to accommodate a 6' sidewalk and 6' parkway on the narrow side of the roadway.

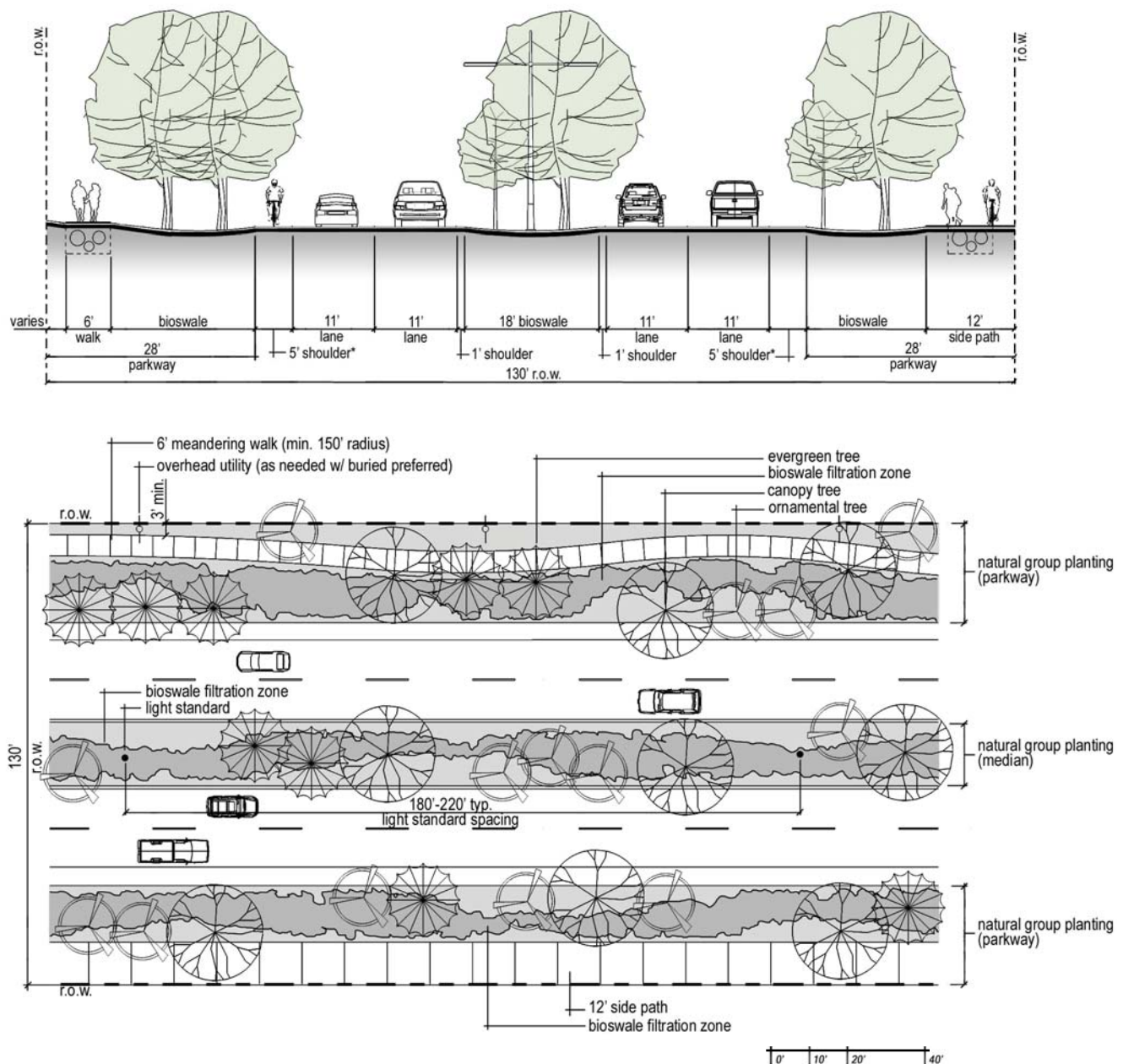


Figure 6.26 – Typical Greenway Arterial Section & Plan: Rural Arterial

The Rural Arterial section is the widest streetscape section at 130' of total width. The unique feature of this roadway is its reverse curb and drainage swales in the medians and parkways. This allows surface water to flow through natural filtration areas before entering the storm sewer system. Plants in the swales filter stormwater runoff to remove pollutants through a variety of physical, chemical, and biological processes. In areas where slopes do not allow swales, these areas will feature native tall grasses. A 12' wide sidepath will accommodate bicycles and pedestrians. In addition, the 5' shoulders can also be used by cyclists. When space allows, parallel water, sewer, or gas lines should not be placed under sidepaths, sidewalks, or trees. However, placement under sidepaths and sidewalks is preferable to placement under trees.

The section illustrated varies slightly from the typical section in the 2008 Thoroughfare Plan. Namely, the median is 2' wider to accommodate a 6' pedestrian refuge (recommended by the Federal Highway Administration), an 11' left turn lane, and the necessary shoulders. In addition, lane widths are 1' narrower to separate the shoulders from the inside and outside travel lanes. Finally, the parkways are narrower in consideration of the wider median.

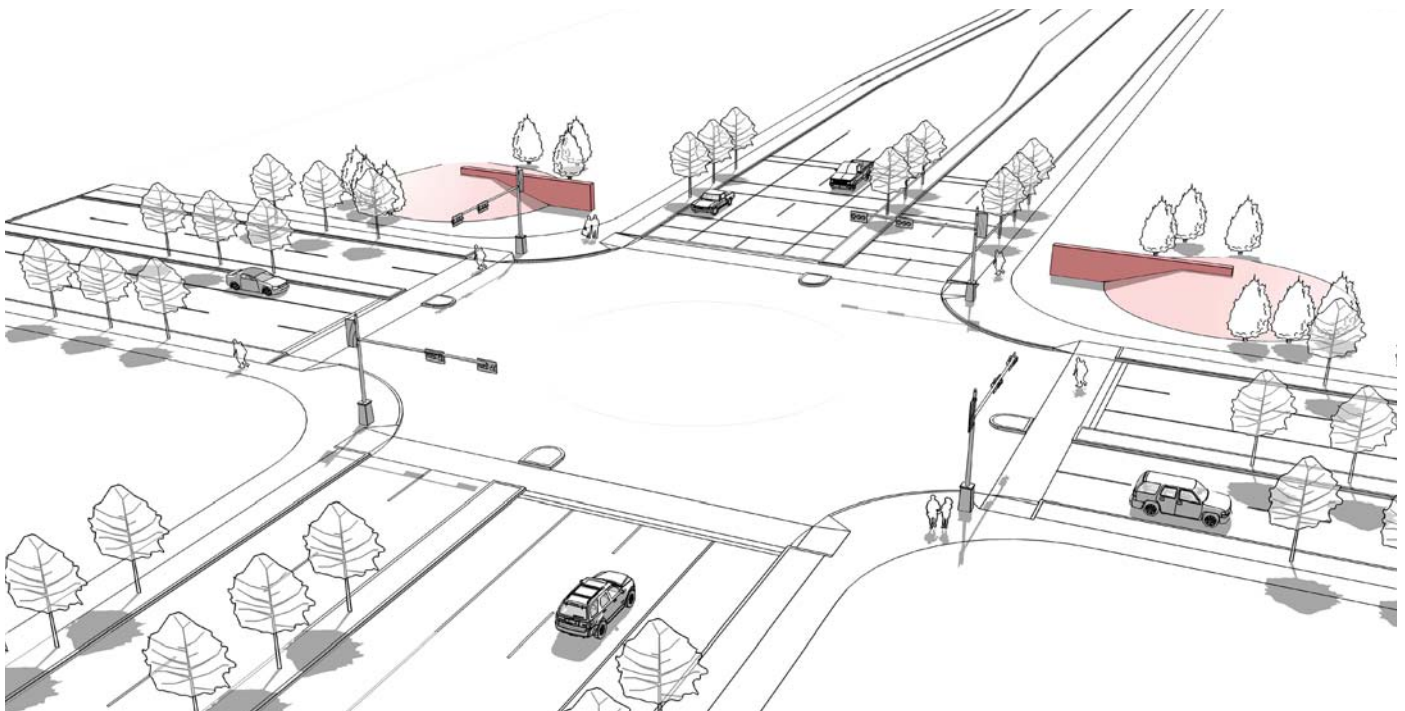


Figure 6.27 – Typical Greenway Arterial Gateway Monumentation

This graphic shows the typical layout and monumentation design for the City Edge Secondary Gateways (see Figure 6.21). Opposing rough limestone walls set into earth-formed berms frame the entrance to Cedar Hill and create an invisible line that people pass through upon entering the city.

6.8 This typology includes other principal and minor arterials in Cedar Hill that are not Core, Transition, or Greenway Arterials.

CONNECTOR ARTERIALS

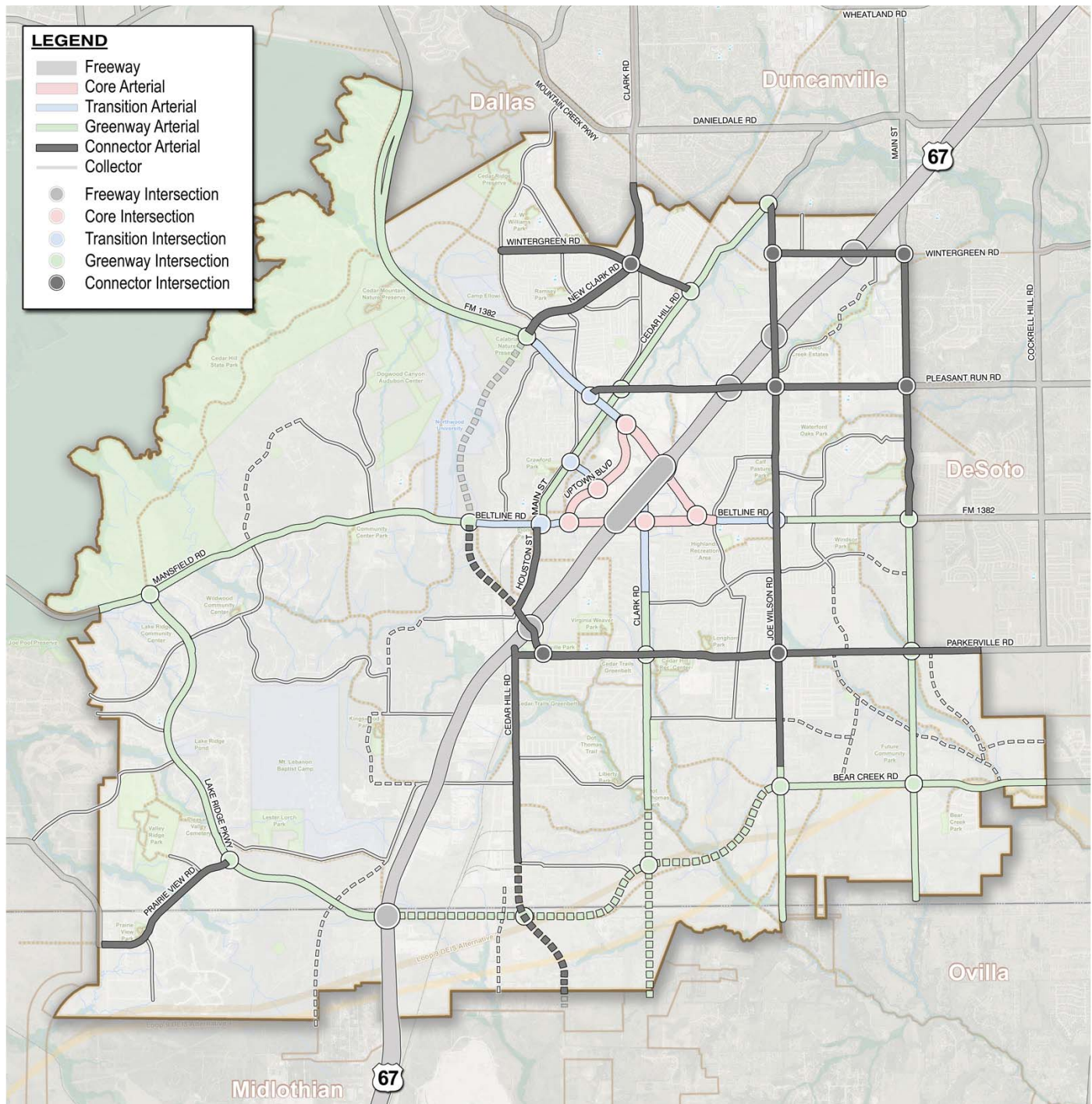


Figure 6.28 – Connector Arterial Typology Map

This map shows the location of the Connector Arterial streetscape typology. This typology does not have accompanying gateways.

Design Concepts

The following concepts shape the design of the Connector Arterial typology:

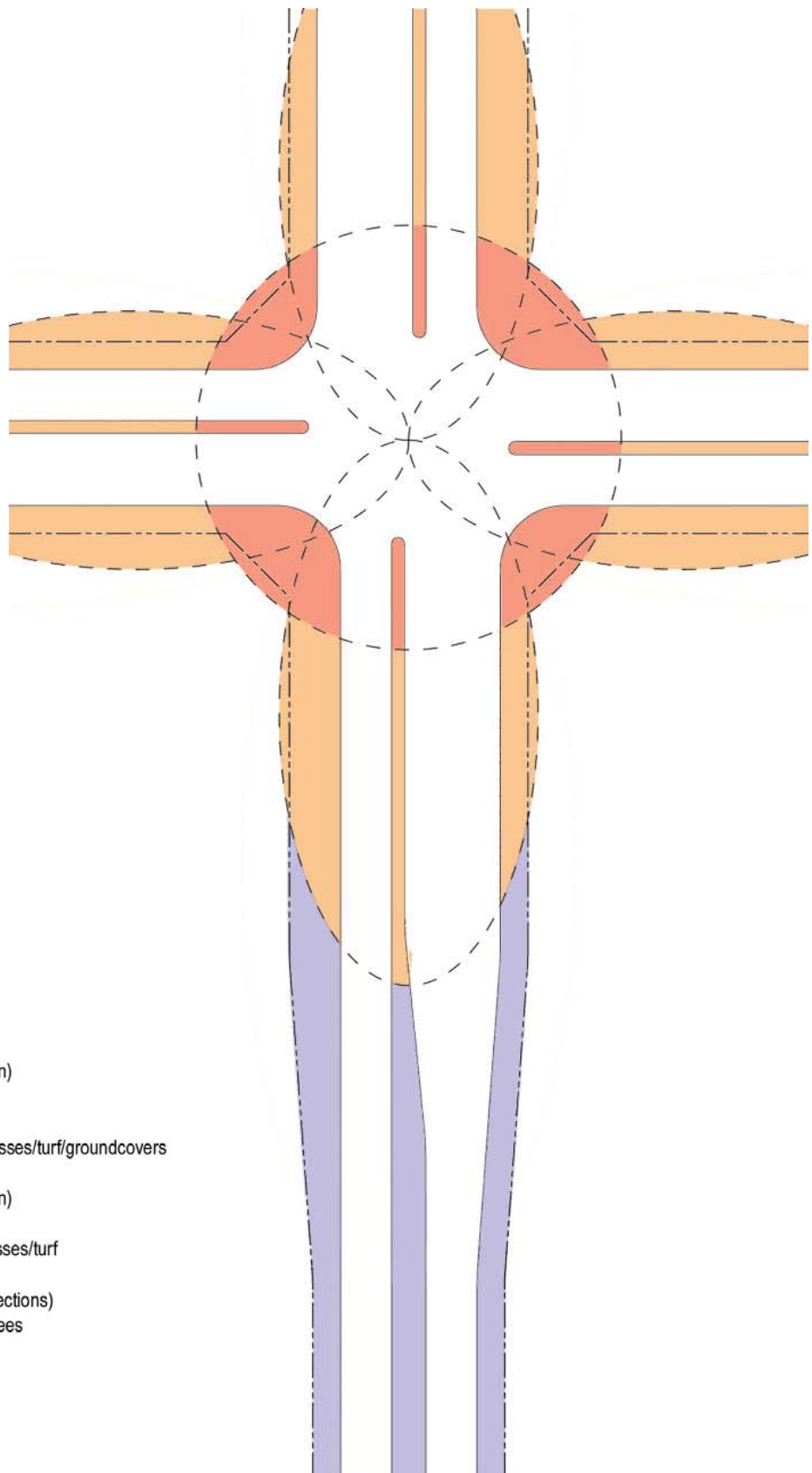
- This streetscape typology is subordinate to other arterial typologies. As such, the design of Collector Arterials should not take away from the natural beauty along Greenway Arterials or the urban vibrancy of the Core. Rather, they should accent and support each other.
- These streetscapes incorporate less intense levels of streetscape enhancements along Connector Arterials, which are less-prominent within the overall network of roadways.
- The overall goal with streetscapes along these roadways is to provide unity and continuity throughout the city.
- Formal and informal plantings are used in balance throughout this typology so as to not overemphasize one over the other.
- Similar to Transition Arterials, Collector Arterials include subtle monumentation at intersections to emphasize continuity within the city.



Figure 6.29 – Connector Arterial Conceptual Diagram

This diagram shows the various zones along the Connector Arterial typology, centered on a typical intersection. This concept focuses on the intersection with a simple treatment along the streetscape corridor. A high-intensity Zone 1 is at the center of the intersection. Then there is a rapid decrease in intensity through Zone 2 until reaching the lower-intensity nature of Zone 4, which extends between intersections.

Note: A series of five zone designations are used in each of the conceptual diagrams in this chapter. Not every zone designation will apply to each conceptual diagram. While there are minor differences within a zone between diagrams, the intent is that a specific zone designation in one diagram will have similar characteristics in terms of intensity and materials as the same designation in another diagram.



- Zone 1 (approx. 100' from center of intersection)
 - monumentation at gateway locations
 - minor paving enhancements
 - medium to small shrubs/medium to low grasses/turf/groundcovers
- Zone 2 (approx. 250' from center of intersection)
 - understory trees
 - medium to small shrubs/tall to medium grasses/turf
- Zone 4 (remaining streetscape between intersections)
 - canopy trees/understory trees/evergreen trees
 - turf

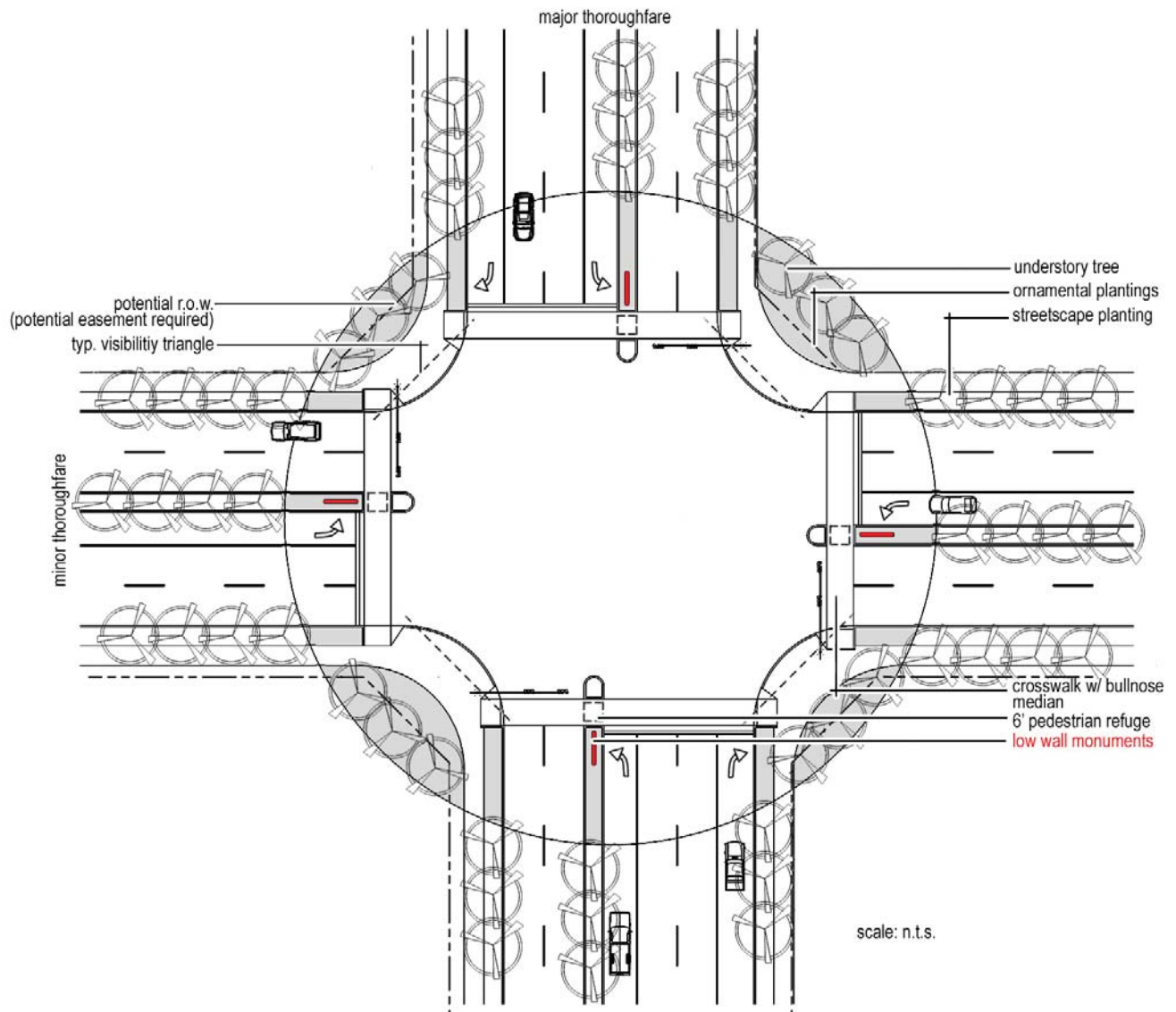


Figure 6.30 – Typical Connector Arterial Intersection Treatment

The typical treatment for Connector Arterial intersections is similar to that of Transition Arterial intersections, in that it incorporates subtle monumentation (highlighted in red) that provides a unifying element repeated throughout the city. The primary difference is that this typology incorporates a smaller amount landscaping and relies more on ornamental trees than shade trees. See Figure 6.28 for specific locations.

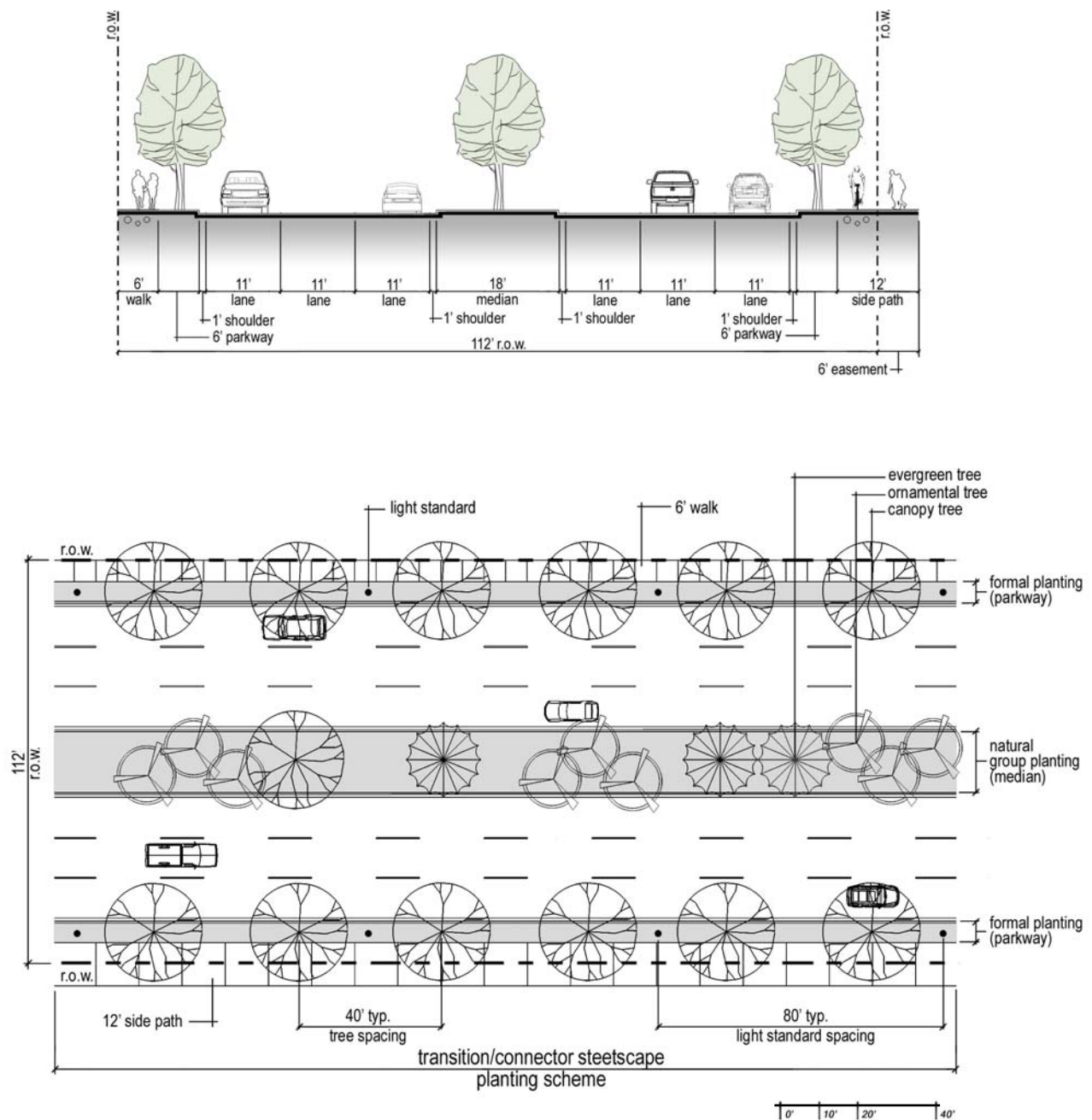


Figure 6.31 – Typical Connector Arterial Section & Plan: Principal Arterial

The Connector Arterial treatment for principal arterials between intersections is the same as Transition Arterials. Bicycles and pedestrians are accommodated by means of a 12' sidepath while landscaping is formal on the roadway edges and more organic in the median.

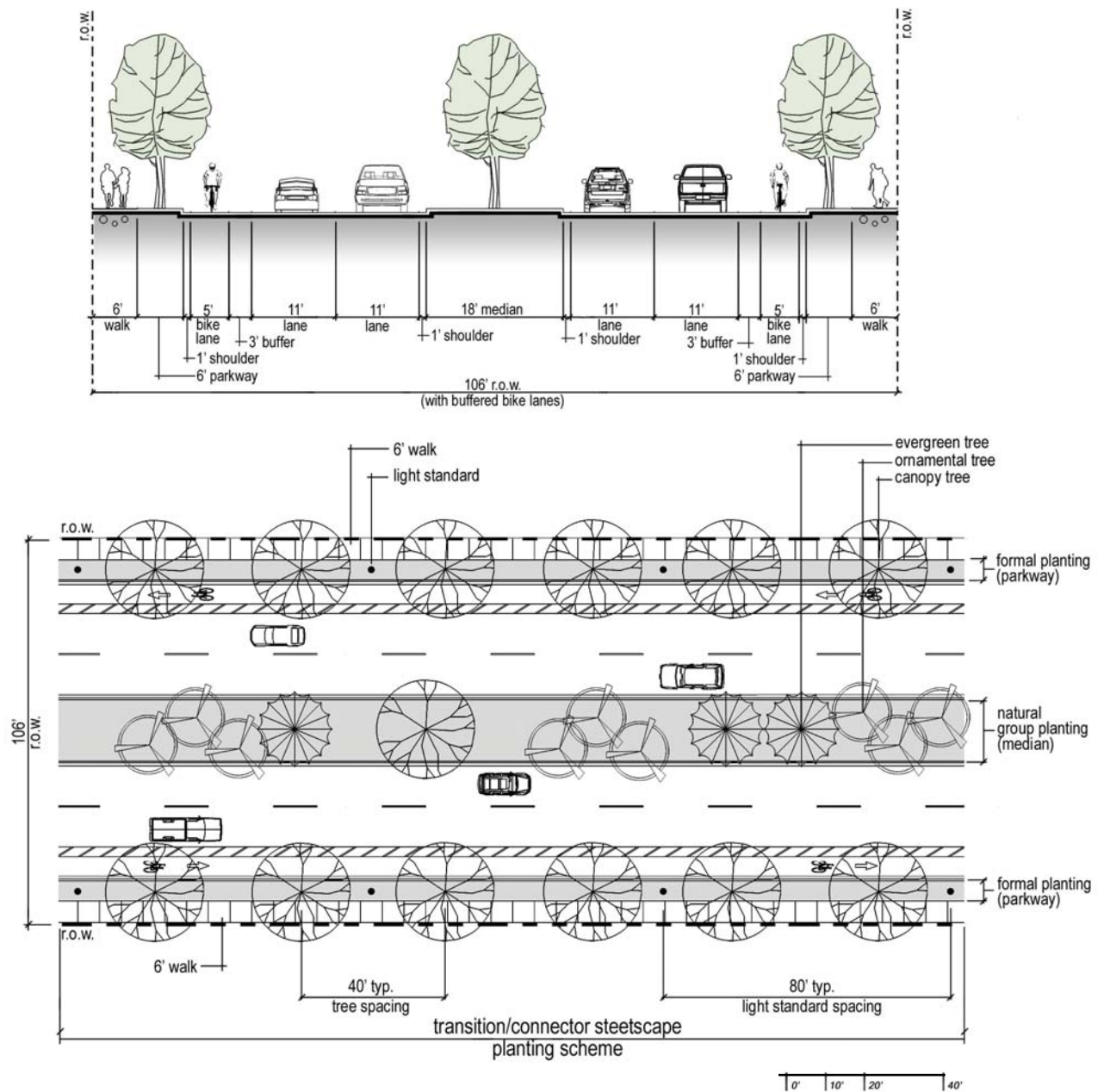


Figure 6.32 – Typical Connector Arterial Section & Plan: Minor Arterial

As with principal arterials, the Connector Arterial treatment for minor arterials is the same as Transition Arterials. Buffered bicycle lanes will be provided along with dual 6' sidewalks.

6.9 Collectors are intermediary roadways that collect traffic from local streets and distribute it to arterial roadways.

COLLECTORS

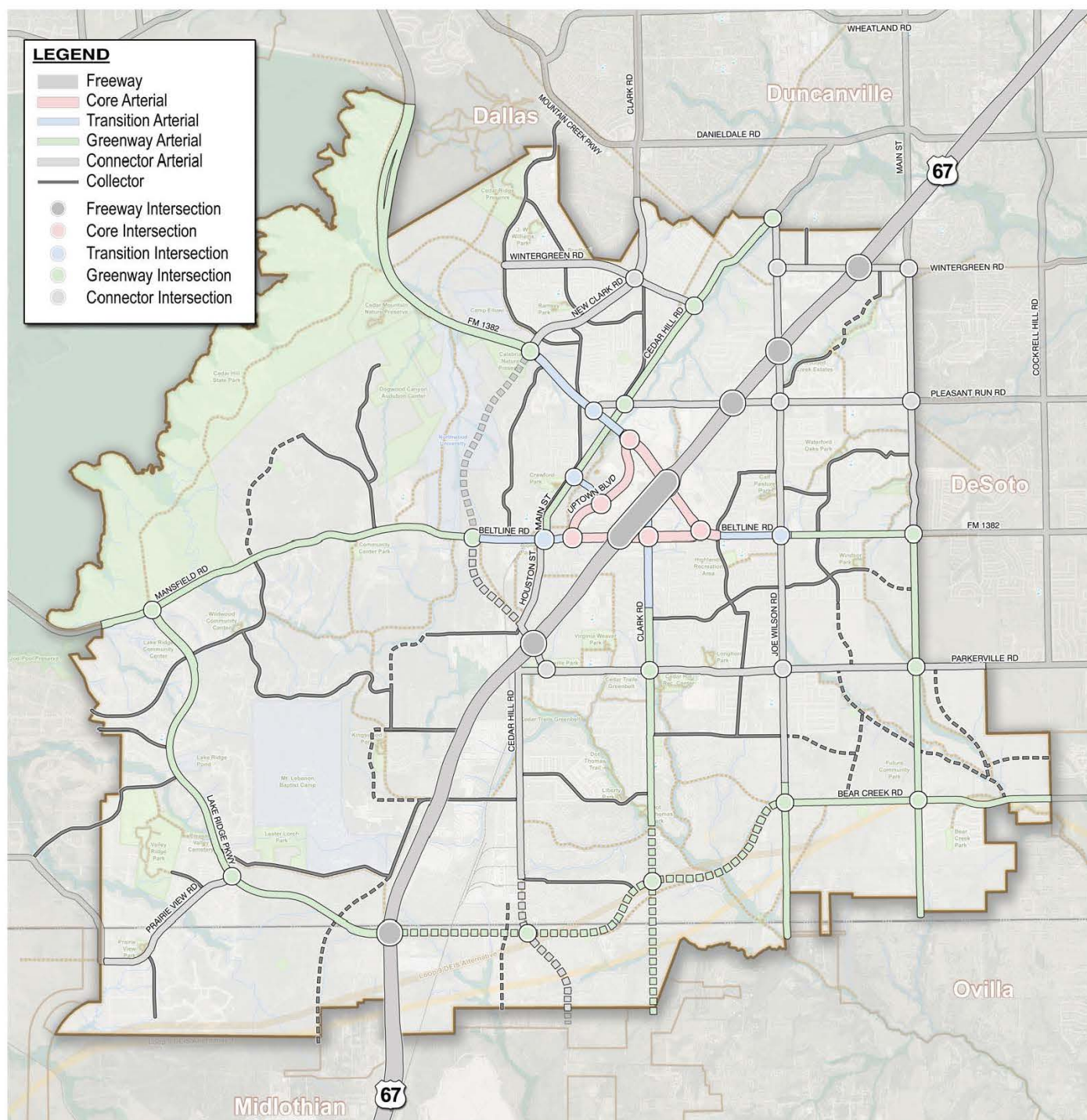


Figure 6.33 – Collector Typology Map

This map shows the location of the Collector streetscape typology. This typology does not have accompanying gateways.

Design Concepts

The following concepts shape the design of the Collector typology:

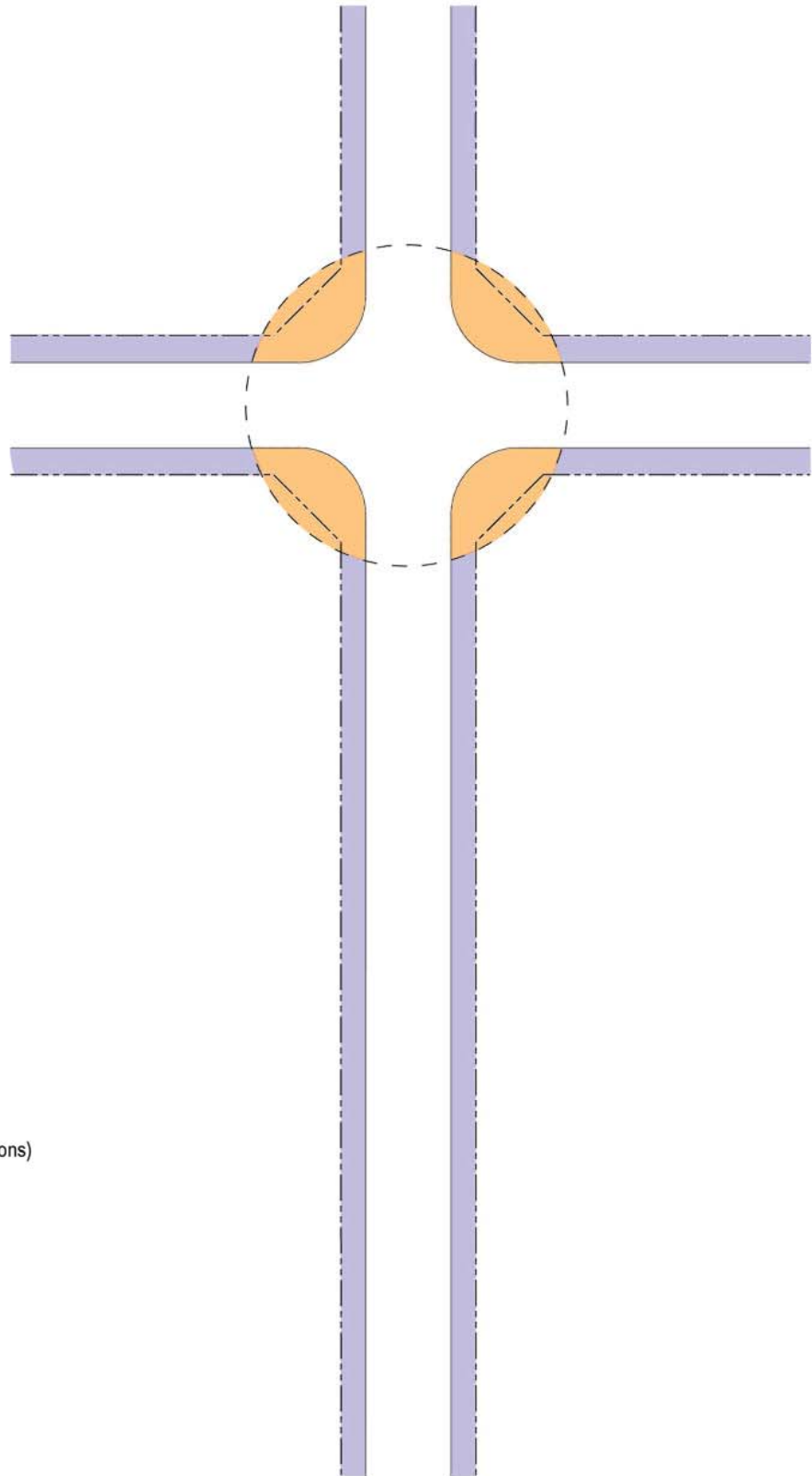
- The design is reflective of the lesser prominence yet intimate character of collector roads within the City's roadway network.
- The limited right-of-way along most collector roads in Cedar Hill limits available space for streetscape enhancements, thereby necessitating design elements that are simplified, yet related to the overall streetscape system.
- The enhancement of collector intersections by means of subtle planting details create quaint/collective environments that provide opportunities for neighborhood focal points.



Figure 6.34 – Collector Conceptual Diagram

This diagram shows the simple design of the Collector typology. A small Zone 2 at the intersection provides a decorative node while the remainder of the streetscape includes simple plantings to fit within the limited right-of-way within neighborhoods

Note: A series of five zone designations are used in each of the conceptual diagrams in this chapter. Not every zone designation will apply to each conceptual diagram. While there are minor differences within a zone between diagrams, the intent is that a specific zone designation in one diagram will have similar characteristics in terms of intensity and materials as the same designation in another diagram.



- Zone 2 (approx. 75' from center of intersection)
 - medium to low grasses
- Zone 4 (remaining streetscape between intersections)
 - canopy trees/understory trees
 - turf grasses

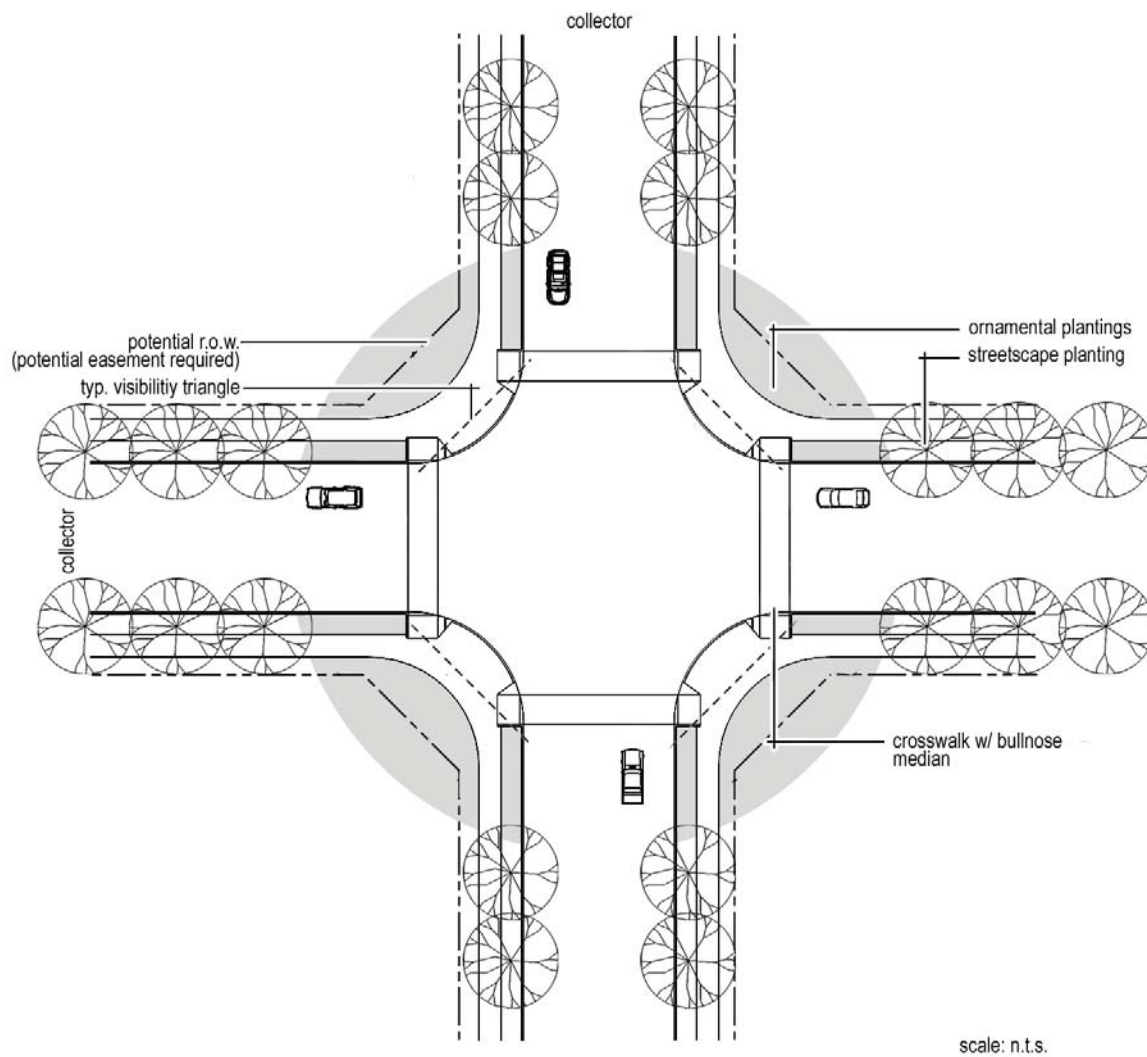


Figure 6.35 – Typical Collector Intersection Treatment

Collector intersections are typically located within neighborhoods and have relatively minimal right-of-way available. As such, the design of the typical intersection treatment is small in scale to reflect the small-scale nature of the roadway itself. Ornamental plantings—such as ground covers and grasses—decorate the corners of the intersections and street trees line the roadway between intersections.

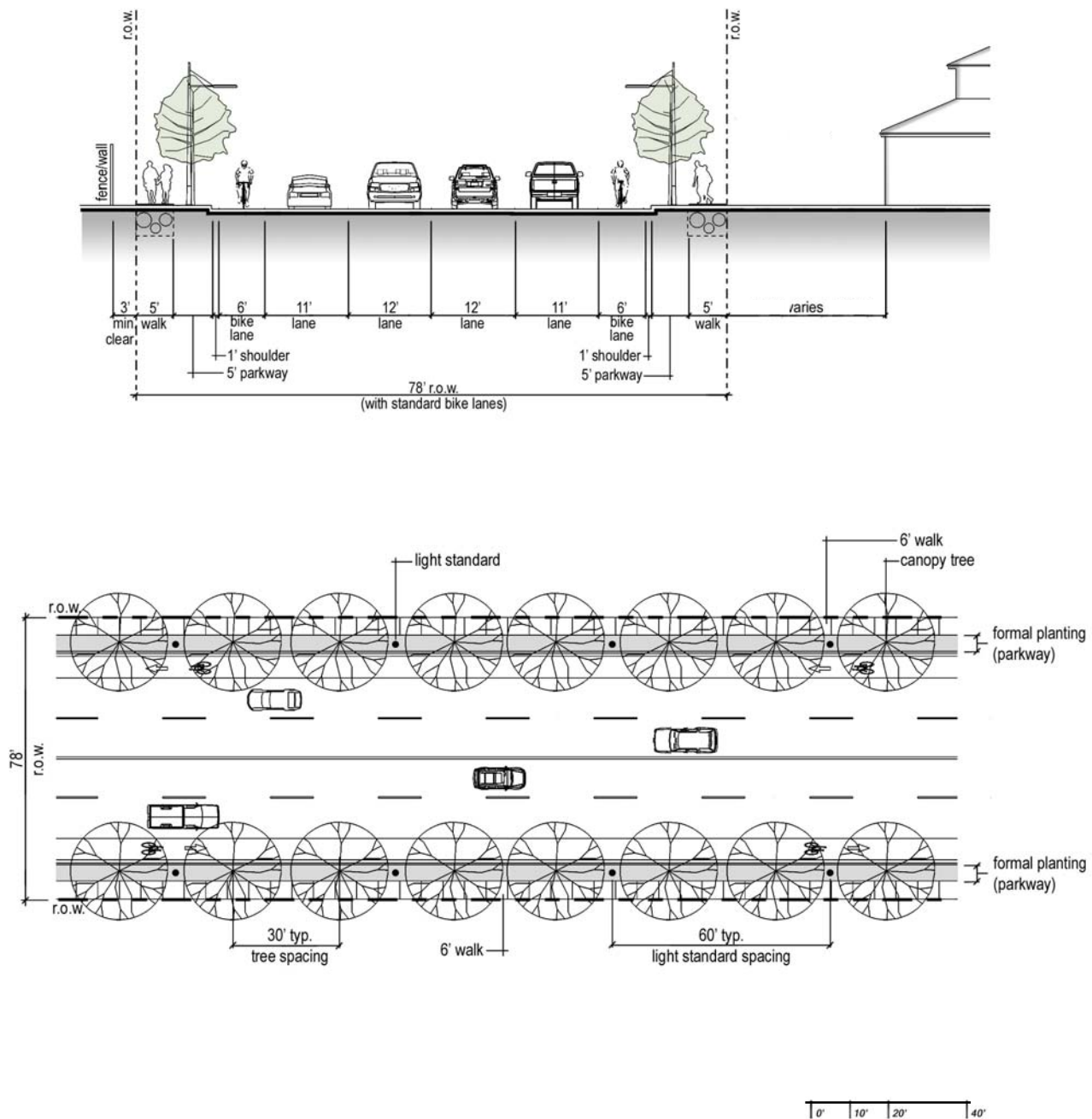


Figure 6.36 – Typical Collector Section & Plan: Major Collector

The typical major collector section includes basic streetscape enhancements in the form of street trees and lighting, as well as dedicated bike lanes and dual 6' sidewalks. While sidewalks are built up to the right-of-way line, it is desirable to have a minimum of 3' of horizontal clearance between sidewalks and any fences or walls.

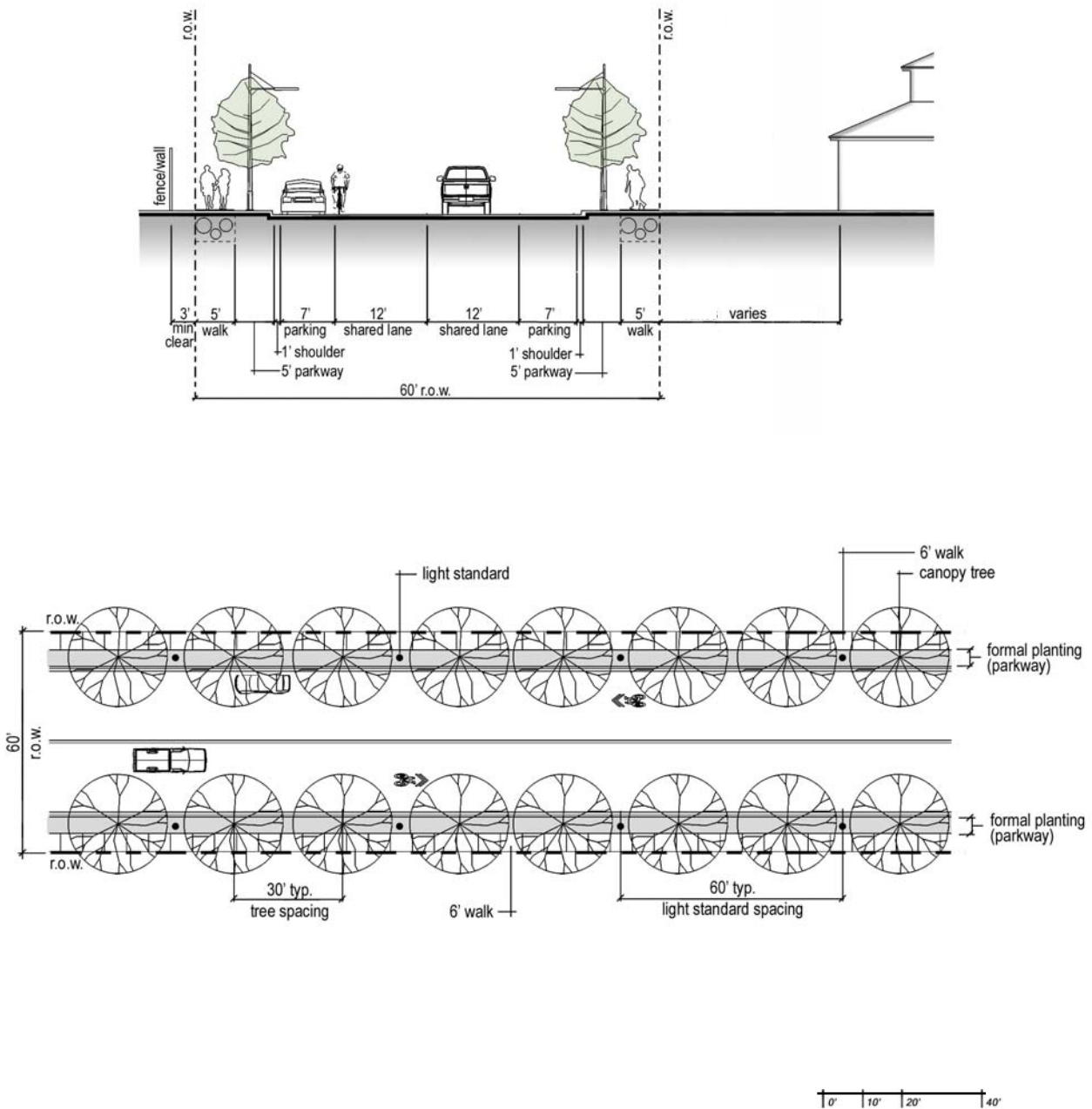


Figure 6.37 – Typical Collector Section & Plan: Minor Collector

The typical minor collector section includes basic streetscape enhancements in the form of street trees and lighting. Bicycles are accommodated by means of shared lanes (wide lanes shared with cars) and pedestrians enjoy dual 5' sidewalks. While sidewalks are built up to the right-of-way line, it is desirable to have a minimum of 3' of horizontal clearance between sidewalks and any fences or walls.

6.10 SITE AMENITIES & FURNISHINGS

Site amenities and furnishings are non-vegetative elements introduced into streetscapes that further create a cohesive appearance throughout Cedar Hill. A combination of natural materials and modern design pieces create a unique contrast between the progressive culture and natural environment of Cedar Hill. This section provides a palette of furnishings that can be used across the city. However, unique design elements—such as those currently in the Downtown area that reflect a historical perspective—may be desirable in certain areas.

Monumentation/Signage

Monumentation and special signage—such as park signs—will be horizontal in form and will be predominantly limestone with metal accents.

Limestone

Limestone will be used throughout Cedar Hill for monumentation in order to blend with the city's natural character. Smooth-cut limestone shall be used within formal or urbanized areas, such as the Core Arterial zone. Within the Transition Arterial zone, a blend of smooth-cut and rough will be used. In less urbanized and natural areas, all signage and monumentation will be rough limestone.

Metal

Metal will serve as an accent material on monumentation and signage. Polished stainless steel is appropriate for urbanized settings while weathered steel (Corten) is appropriate for natural areas. Metal can be used as accent bands or can be laser-cut in the form of the City's tree-on-hill logo (see Figure 6.38).

Figure 6.38 – Monumentation Materials

From left to right: rough limestone, smooth-cut limestone, weathered steel (Corten), and ground stainless steel.



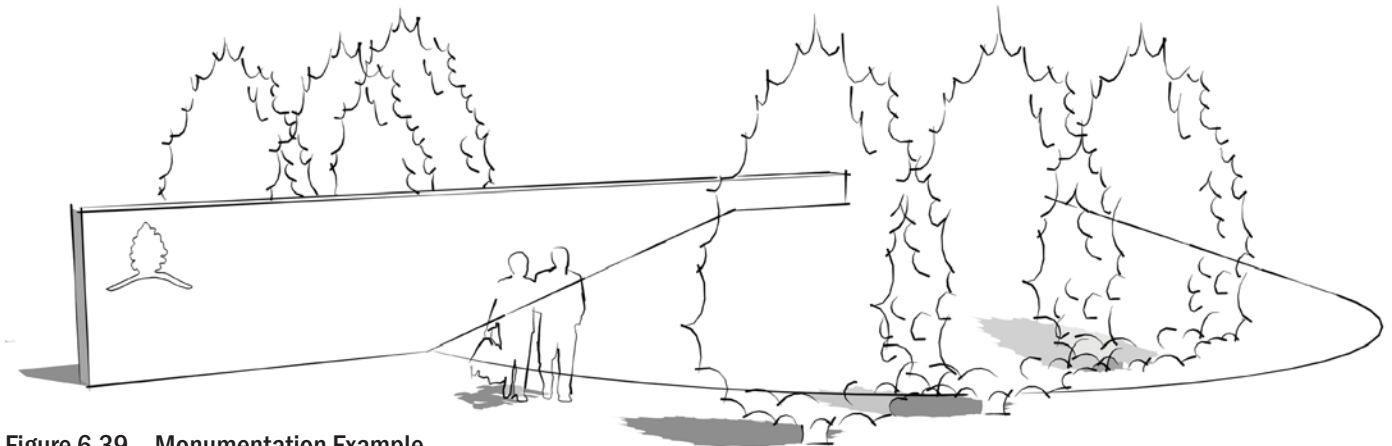


Figure 6.39 – Monumentation Example

The image illustrates a potential design for a monument. A limestone wall with a metal city logo intersects an earthen berm.

Lighting

The palette includes three types of lighting: pedestrian level overhead lighting, vehicular level lighting, and lighted bollards.

Pedestrian Level Overhead Lighting



Source: Landscape Forms



Source: Kim Lighting, Inc.



Source: Forms+Surfaces

Vehicular Level Lighting



Source: NERI



Source: Kim Lighting



Source: NERI

Lighted Bollards



Source: Landscape Forms



Source: Maglin Site Furniture, Inc.



Source: Forms+Surfaces

Benches



Source: Landscape Forms



Source: Maglin Site Furniture, Inc.



Source: Forms+Surfaces

Tables



Source: Landscape Forms



Source: Maglin Site Furniture, Inc.



Source: Forms+Surfaces

Trash Receptacles



Source: Landscape Forms



Source: Maglin Site Furniture, Inc.



Source: Forms+Surfaces

Bike Racks



Source: Landscape Forms



Source: Maglin Site Furniture, Inc.



Source: Forms+Surfaces

Crosswalks, Enhanced Paving Bands, and Median Nosing



Source: Pavestone



Source: Bowmanite



Source: Scofield

Handicap Access Ramps



Source: Pavestone



Source: Neenah Foundry



Source: Hanover Architectural Products

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6.11 IMPLEMENTATION

The most efficient way to implement streetscape improvements is in conjunction with other roadway projects. Simultaneous design and construction reduces the overall costs of the project and ensures consistency between various elements—the roadway itself, landscaping, monuments, and bike/pedestrian facilities. Therefore, the selection of priority streetscape projects is closely tied to upcoming roadway projects. Gateway implementation projects can be exceptions to this approach. While the development of a gateway concurrent with other roadway and streetscape projects will provide the most cohesive design, gateways can be implemented ad hoc so long as future right-of-way limits and roadway configurations are known and provided for.

These projects listed in Table 6.1 and 6.2 represent the top priorities for streetscape implementation based on upcoming roadway projects. The selection of gateway projects was made to prioritize the most visible of the gateway locations identified in Figure 6.1 on page 6-7.

Table 6.1 – Priority Gateway Projects

Project Type	Location	Streetscape Typology	Associated Bike & Pedestrian Facilities
Gateway	Belt Line Road/ FM-1382	City Core Secondary Gateway	Wide Crosswalks; Bike Traffic Signals; Adjust Signal Phasing*
Gateway	US-67 between Joe Wilson Road and Wintergreen Road	Major City Gateway	
Gateway	US-67 from FM- 1382 to Belt Line Road	Major City Gateway	Wide Crosswalks; Bike Traffic Signals; Adjust Signal Phasing*
Gateway	FM-1382 at City Limits	City Edge Secondary Gateway	
Gateway	Mansfield Road at City Limits	City Edge Secondary Gateway	

*Signal phasing adjustments require detailed analysis and unique solutions for each intersection. In some cases, an all-red phase will allow cyclists and pedestrians to proceed through the intersection without any motor vehicle movement. This is especially important to allow cyclists to make left turns without having to mix with motor vehicle traffic. Other innovative solutions such as bike boxes (which provide space for cyclists to wait for a green light) and bike-specific left turn lanes may improve intersection operations for mixed traffic.

Table 6.2 – Priority Streetscape Projects

Project Type	Location	Project Extents	Preferred Roadway Section	Streetscape Typology	Associated Bike & Pedestrian Facilities
Corridor*	South Clark Road	US-67 to Weaver Street	4-Lane Divided	Transition Arterial	Cycle Tracks; Dual 6' Sidewalks
		Weaver Street to Parkerville Road		Greenway Arterial (Off-Center)	Bike Lanes; 12' Sidepath; 6' Sidewalk
Corridor*	Mansfield Road	City Limits to Belt Line Road	4-Lane Divided	Greenway Arterial (Rural)	Bike Lanes; 12' Sidepath; 6' Sidewalk
Corridor*	FM-1382	City Limits to Cedar Hill Road	6-Lane Divided	Greenway Arterial (Rural)	Bike Lanes; 12' Sidepath; 6' Sidewalk
Corridor*	US-67	Northern City Limits to Belt Line Road	--	Freeway	Service Roads: Bike Lanes; Dual 6' Sidewalks**
Individual Intersection	Pleasant Run Road/Duncanville Road [†]	--	--	Connector Intersection	Wide Crosswalks; Bike Traffic Signals; Adjust Signal Phasing [‡]

*Corridor projects include intersection improvements within the corridor.

**Although freeway corridors are typically not a cyclist or pedestrian's first choice for facilities, recent Federal Highway Administration initiatives will require the inclusion of bicycle and pedestrian infrastructure in the future if/when TxDOT reconstructs US-67.

[†]This project is associated with another project currently under design (Pleasant Run Road from Joe Wilson Road to Duncanville Road).

[‡]Signal phasing adjustments require detailed analysis and unique solutions for each intersection. In some cases, an all-red phase will allow cyclists and pedestrians to proceed through the intersection without any motor vehicle movement. This is especially important to allow cyclists to make left turns without having to mix with motor vehicle traffic. Other innovative solutions such as bike boxes (which provide space for cyclists to wait for a green light) and bike-specific left turn lanes may improve intersection operations for mixed traffic.

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